United States Department of Agriculture

Natural Resources Conservation Service

In cooperation with United States Department of the Interior, Bureau of Land Management and Bureau of Indian Affairs, and University of Nevada, Agricultural Experiment Station

Soil Survey of Washoe County, Nevada, Central Part

Volume 1

How To Use This Soil Survey

General Soil Map

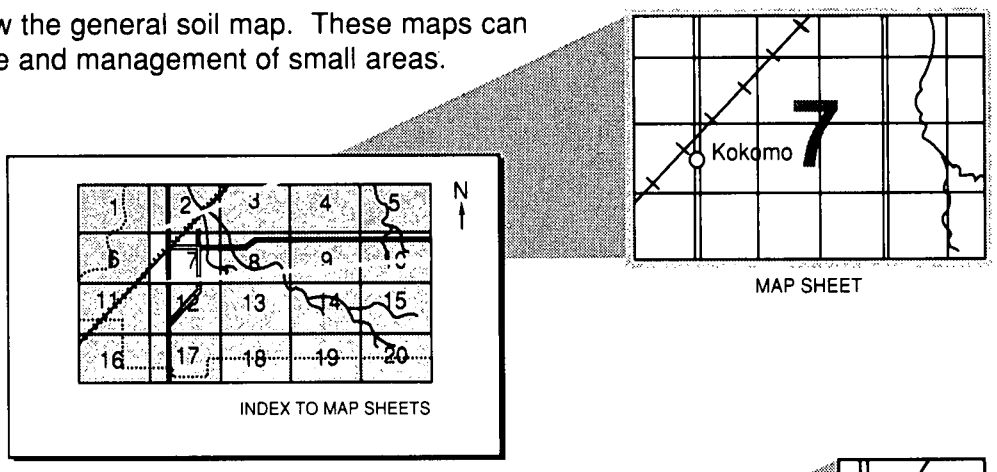
The general soil map, which is the color map preceding the detailed soil maps, shows the survey area divided into groups of associated soils called general soil map units. This map is useful in planning the use and management of large areas.

To find information about your area of interest, locate that area on the map, identify the name of the map unit in the area on the color-coded map legend, then refer to the section **General Soil Map Units** for a general description of the soils in your area.

Detailed Soil Maps

The detailed soil maps follow the general soil map. These maps can be useful in planning the use and management of small areas.

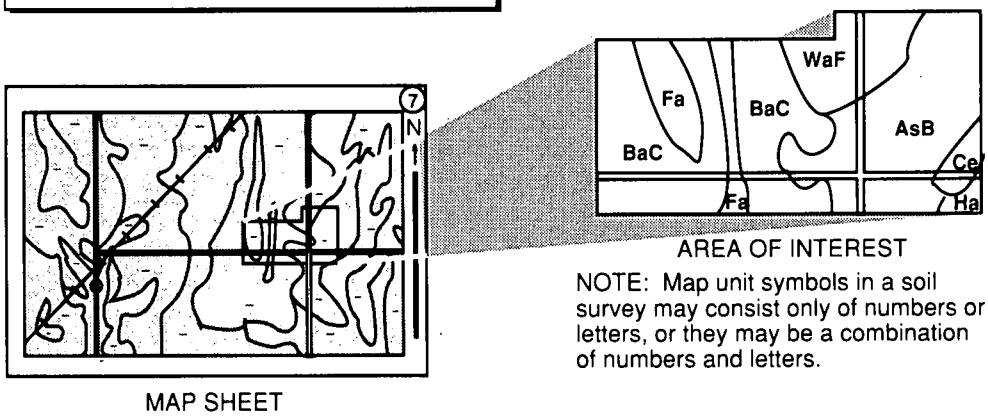
To find information about your area of interest, locate that area on the **Index to Map Sheets**, which precedes the soil maps. Note the number of the map sheet, and turn to that sheet.



INDEX TO MAP SHEETS

MAP SHEET

Locate your area of interest on the map sheet. Note the map unit symbols that are in that area. Turn to the **Index to Map Units** (see Contents), which lists the map units by symbol and name and shows the page where each map unit is described.



MAP SHEET

AREA OF INTEREST

NOTE: Map unit symbols in a soil survey may consist only of numbers or letters, or they may be a combination of numbers and letters.

The **Summary of Tables** shows which table has data on a specific land use for each detailed soil map unit. See **Contents** for sections of this publication that may address your specific needs.

This soil survey is a publication of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (formerly the Soil Conservation Service) has leadership for the Federal part of the National Cooperative Soil Survey.

Major fieldwork for this soil survey was completed in 1988. Soil names and descriptions were approved in 1990. Unless otherwise indicated, statements in this publication refer to conditions in the survey area in 1988. This survey was made cooperatively by the United States Department of Agriculture, Natural Resources Conservation Service; the United States Department of the Interior, Bureau of Land Management and Bureau of Indian Affairs; and the University of Nevada, Agricultural Experiment Station. It is part of the technical assistance furnished to the Washoe-Storey Soil Conservation District.

Soil maps in this survey may be copied without permission. Enlargement of these maps, however, could cause misunderstanding of the detail of mapping. If enlarged, maps do not show the small areas of contrasting soils that could have been shown at a larger scale.

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Contents

Index to map units v
Summary of tables viii
Foreword ix
General nature of the survey area 1
How this survey was made 5
General soil map units 7
Detailed soil map units 15
Prime farmland 325
Use and management of the soils 327
Crops and pasture 327
Resource management for rangeland, woodland, and wildlife habitat 329
Windbreaks and environmental plantings 336
Recreation 336
Engineering 337
Soil properties 341
Engineering index properties 341
Physical and chemical properties 342
Soil and water features 343
Classification of the soils 347
Taxonomic units and their morphology 347
Aquic Torriorthents 347
Arclay series 348
Arzo series 349
Barnard series 350
Benin series 351
Berit series 352
Bluewing series 353
Bombadil series 353
Boulder Lake series 354
Brubeck series 355
Bucklake series 356
Buffaran series 357
Burnborough series 358
Ceejay series 359
Cewat series 360
Chalco series 360
Chappuis series 361
Chill series 362
Chuckles series 363
Churchill series 364
Cleaver series 365
Coppereid series 366
Corral series 367
Davey series 368
Deadyon series 369
Deanran series 370
Dedmount series 370
Devada series 371
Dithod series 372
Dorper series 373
Dosie series 374
Dun Glen series 375
Eaglerock series 377
Espil series 377
Fireball series 378
Fluvaquents 379
Foxcan series 380
Fulstone series 380
Galeppi series 381
Ganaflan series 382
Gitakup series 383
Glenbrook series 384
Granipeak series 385
Graufels series 385
Greenbrae series 386
Hart Camp series 387
Hastee series 388
Hawsley series 389
Haybourne series 389
Hefed series 390
Home Camp series 391
Hooplite series 392
Horsecamp series 393
Hutchley series 394
Incy series 395
Indiano series 395
Isolde series 396
Ister series 396
Jaybee series 397
Jerval series 398
Juva series 399

Kaffur series 400
Kayo series 400
Kreza series 401
Kumiva series 402
Labkey series 403
Langston series 404
Leviathan series 405
Mahala series 406
Manogue series 407
Mastly series 408
Mazuma series 409
Mottsville series 410
Newlands series 411
Ninemile series 411
Noslo series 412
Old Camp series 413
Oppio series 414
Osobb series 415
Perwaso series 415
Phing series 416
Phliss series 417
Pickup series 418
Prunie series 419
Ragtown series 420
Reywat series 421
Rezave series 422
Ruhe series 423
Shawave series 423
Singatse series 425
Skedaddle series 425
Slaw series 426
Slocave series 426
Smaug series 427
Softscrabble series 428
Sojur series 429
Springmeyer series 429
Squawval series 430
Sumine series 431
Swingler series 432
Terca series 433
Theon series 434
Thulepah series 434
Tosp series 435
Toulon series 436
Tresed series 437
Trocken series 438
Truckee series 439
Tunnison series 440
Typic Torriorthents 441
Umberland series 441
Verdico series 442
Veta series 443
Voltaire series 444
Wagore series 444
Wylo series 445
Xeric Torriorthents 446
Zorravista series 447
Formation of the soils 449
References 455
Glossary 457
Appendix 467
Tables 477
Rangeland plants and woodland understory 681

Issued September 1997

Index to Map Units

120—Home Camp-Newlands association 16
131—Devada-Hart Camp-Tunnison association 18
133—Devada-Tunnison-Softscrabble association 19
134—Devada-Dosie-Softscrabble association 22
135—Devada-Hart Camp association 24
136—Devada-Tunnison association 25
137—Devada-Tunnison-Rock outcrop association 27
138—Devada-Reywat-Tunnison association 28
150—Skedaddle-Old Camp-Rock outcrop association 30
151—Skedaddle-Jaybee-Rock outcrop association 32
160—Dun Glen-Davey-Hawsley association 34
170—Zorravista-Davey association 36
171—Zorravista sand, 4 to 15 percent slopes 37
172—Zorravista-Swingler association 38
181—Tunnison-Devada association 39
182—Tunnison-Rubble land association 41
183—Tunnison complex, 0 to 8 percent slopes 43
190—Swingler complex, 2 to 4 percent slopes 44
193—Swingler-Ragtown association 45
200—Churchill-Swingler association 47
210—Veta-Langston association 48
212—Veta-Trocken association 50
220—Cewat very stony fine sandy loam, 4 to 15 percent slopes 51
241—Benin complex 52
250—Old Camp-Reywat-Jaybee association 54
251—Old Camp-Jaybee-Pickup association 56
258—Old Camp-Reywat-Theon association 58
261—Pickup-Bucklake association 60
262—Pickup-Bucklake-Terca association 61
264—Pickup-Wylo association 63
271—Wylo-Pickup-Bucklake association 65
272—Wylo-Manogue-Pickup association 67
273—Wylo-Bucklake-Rock outcrop association 69
274—Wylo-Rock outcrop association 70
279—Wylo-Reywat-Rock outcrop association 71
280—Bombadil-Old Camp-Reywat association 73
282—Bombadil-Hefed-Rubble land association 75
283—Bombadil-Ceejay association 77
284—Bombadil-Corral association 79
310—Jaybee-Pickup association 80
312—Jaybee-Old Camp-Reywat association 82
313—Jaybee-Bombadil-Old Camp association 84
314—Jaybee-Oppio-Old Camp association 86
315—Jaybee-Bombadil-Rock outcrop association 88
316—Jaybee-Manogue-Fulstone association 90
317—Jaybee-Corral-Oppio association 92
318—Jaybee-Reywat association 94
330—Hart Camp-Devada association 95
340—Reywat-Rock outcrop complex, 15 to 50 percent slopes 97
344—Reywat-Ister association 98
362—Brubeck very cobbly clay, 0 to 4 percent slopes 99
370—Terca-Softscrabble-Rock outcrop association 100
371—Terca-Devada-Rock outcrop association 102
372—Terca-Devada association 103
373—Terca-Softscrabble-Devada association 105
374—Terca-Reywat-Wylo association 107
420—Fulstone-Wylo association 109
421—Fulstone-Chalco association 110
422—Fulstone very stony loam, 4 to 15 percent slopes 112
441—Rezave-Theon association 113
460—Chill-Jaybee association 114
491—Oppio very stony loam, 4 to 15 percent slopes 116
500—Smaug very fine sandy loam, 2 to 8 percent slopes 117
510—Bucklake-Bombadil-Reywat association 117
511—Bucklake-Corral-Rubble land association 120
513—Bucklake-Reywat association 121
515—Bucklake-Reywat-Devada association 123
517—Bucklake-Softscrabble-Devada association 125
518—Bucklake-Pickup-Wylo association 127

540—Mazuma complex, 0 to 4 percent slopes 129
541—Mazuma fine sandy loam, 0 to 4 percent slopes 131
542—Mazuma-Ragtown association 132
543—Mazuma-Swingler association 133
545—Mazuma-Davey association..... 135
546—Mazuma association 137
547—Mazuma fine sandy loam, moderately sodic, 0 to 4 percent slopes 138
548—Mazuma silt loam, 0 to 4 percent slopes 139
549—Mazuma-Smaug association..... 140
560—Toulon-Mazuma-Hawsley association..... 142
561—Toulon-Trocken-Mazuma association 144
580—Verdico-Corral association..... 146
581—Verdico-Chalco association..... 147
590—Buffaran stony loam, 2 to 15 percent slopes 149
591—Buffaran-Bombadil-Rock outcrop association 150
592—Buffaran-Corral association..... 151
610—Haybourne-Mottsville-Incy association 153
611—Haybourne-Zorravista-Fulstone association 155
614—Haybourne loamy sand, 4 to 15 percent slopes 157
615—Haybourne-Dun Glen association 158
616—Haybourne sandy loam, 2 to 8 percent slopes 159
620—Leviathan-Barnard association..... 160
621—Leviathan-Springmeyer-Haybourne association 161
622—Leviathan very gravelly loam, 2 to 8 percent slopes..... 164
630—Chappuis sandy loam..... 164
702—Graufels-Glenbrook association..... 165
710—Thulepah-Hutchley association..... 167
711—Thulepah-Hutchley-Rock outcrop association 168
721—Softscrabble-Sumine-Hutchley association ... 170
722—Softscrabble-Bucklake-Indiano association ... 172
723—Softscrabble-Hutchley-Thulepah association 174
725—Softscrabble-Sumine-Prunie association 176
726—Softscrabble-Dosie-Devada association..... 178
727—Softscrabble-Hart Camp association..... 180
728—Softscrabble-Hutchley-Burnborough association 182
729—Softscrabble-Dosie-Hutchley association..... 184
730—Arzo-Indiano-Barnard association 186
750—Gitakup-Tresed-Ragtown association..... 188
760—Ganaflan-Smaug-Trocken association 190
770—Tresed-Gitakup-Playas complex..... 192
780—Chuckles-Playas complex 194
781—Chuckles-Ragtown-Playas complex..... 195
790—Galeppi-Barnard association..... 197
800—Boulder Lake silty clay 198
810—Voltaire-Truckee association..... 199
811—Voltaire-Fluvaquents-Veta association 200
820—Horsecamp-Mahala association 202
831—Kayo very stony sandy loam, 2 to 8 percent slopes..... 204
841—Beaches..... 205
850—Osobb-Rezave-Fireball association..... 205
890—Slocave-Arclay-Rock outcrop association 207
892—Slocave-Singatse-Jaybee association..... 209
893—Slocave-Rock outcrop association..... 211
900—Playas..... 212
901—Dune land-Playas complex, 0 to 30 percent slopes 213
910—Shawave-Deadyon association..... 214
930—Typic Torriorthents-Aquic Torriorthents complex, 0 to 4 percent slopes 215
940—Hawsley association 217
950—Cleaver-Xeric Torriorthents association 218
972—Isolde-Toulon complex, 2 to 15 percent slopes 220
1043—Bluewing-Trocken association 221
1060—Trocken-Mazuma association..... 222

1061—Trocken-Bluewing association 224
1063—Trocken-Ganaflan-Bluewing association, dry..... 225
1064—Trocken, stony-Mazuma association..... 227
1065—Trocken-Ruhe-Bluewing association..... 229
1067—Trocken, moist-Mazuma association..... 231
1068—Trocken-Hawsley association..... 232
1160—Glenbrook-Graufels-Rock outcrop association 234
1190—Ragtown-Isolde complex, 0 to 15 percent slopes 235
1191—Ragtown association..... 236
1192—Ragtown-Umberland association 238
1194—Ragtown-Swingler-Benin association 240
1200—Dosie-Devada association..... 242
1201—Dosie-Rubble land association..... 243
1220—Ceejay-Pickup association..... 244
1221—Ceejay stony loam, 4 to 30 percent slopes 246
1222—Ceejay-Verdico-Chalco association..... 247
1230—Singatse-Jaybee association 249
1240—Labkey-Mazuma association..... 250
1250—Jerval-Dorper association 251
1251—Jerval-Kumiva association..... 253
1254—Jerval-Trocken association 255
1255—Jerval-Veta association 257
1260—Sojur-Phliss association..... 259
1270—Deadyon sandy loam, 4 to 8 percent slopes 260
1290—Hutchley-Terca association..... 261
1310—Hooplite-Singatse association..... 263
1320—Jaybee-Theon-Singatse association..... 264
1340—Phing stony sandy loam, 2 to 8 percent slopes 266
1360—Mastly-Mazuma association 267
1370—Theon-Jaybee association..... 269
1372—Theon-Old Camp association..... 270
1373—Theon-Trocken-Singatse association 272
1392—Ninemile-Newlands association 274
1401—Dedmount-Umberland association..... 275
1410—Juva loam 276
1420—Perwaso complex 277
1430—Slaw complex..... 279
1440—Umberland silty clay loam 280
1442—Umberland-Benin association..... 281
1443—Umberland-Ragtown association 282
1444—Umberland silty clay loam, ponded..... 284
1445—Umberland-Playas-Ragtown association 285
1446—Umberland association..... 286
1447—Umberland-Dedmount association..... 287
1460—Chalco association 289
1461—Chalco-Pickup association..... 290
1470—Squawval-Hutchley-Tosp association 293
1480—Eaglerock-Wagore association..... 295
1490—Berit-Deanran-Rock outcrop association 296
1491—Berit-Noslo-Rock outcrop association..... 298
1500—Hastee-Granipeak-Rock outcrop association 299
1510—Greenbrae fine sandy loam, 4 to 15 percent slopes..... 301
1520—Kaffur-Slocave-Rock outcrop association ... 302
1530—Coppereid-Kreza association 303
1540—Foxcan-Sojur-Rock outcrop association..... 305
1550—Wylo-Ister association 307
1552—Wylo-Bucklake association 308
1560—Manogue-Ceejay association 310
1570—Espil gravelly sandy loam, 2 to 15 percent slopes 311
1580—Trocken-Ganaflan-Bluewing association 312
1581—Trocken-Mazuma-Hawsley association 314
1590—Typic Torriorthents-Ragtown association.... 316
1600—Dithod loam..... 318
1601—Dithod-Fluvaquents association..... 318
1620—Mazuma-Hawsley association 320
1621—Mazuma, clayey substratum association 322
1630—Veta-Mazuma association..... 323

Summary of Tables

Temperature and precipitation (table 1) 478

Freeze dates in spring and fall (table 2) 480

Growing season (table 3) 482

Acreage and proportionate extent of the soils (table 4) 483

Rangeland seeding (table 5) 487

Building site development and construction materials (table 6) 505

Engineering index properties (table 7) 541

Physical and chemical properties of the soils (table 8) 607

Water features (table 9) 641

Soil features (table 10) 660

Classification of the soils (table 11) 679

Foreword

This soil survey contains information that can be used in land-planning programs in the survey area. It contains predictions of soil behavior for selected land uses. The survey also highlights limitations and hazards inherent in the soil, improvements needed to overcome the limitations, and the impact of selected land uses on the environment.

This soil survey is designed for many different users. Farmers, ranchers, foresters, and agronomists can use it to evaluate the potential of the soil and the management needed for maximum food and fiber production. Planners, community officials, engineers, developers, builders, and home buyers can use the survey to plan land use, select sites for construction, and identify special practices needed to ensure proper performance. Conservationists, teachers, students, and specialists in recreation, wildlife management, waste disposal, and pollution control can use the survey to help them understand, protect, and enhance the environment.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are shallow to bedrock. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

These and many other soil properties that affect land use are described in this soil survey. Broad areas of soils are shown on the general soil map. The location of each soil is shown on the detailed soil maps. Each soil in the survey area is described. Information on specific uses is given for each soil. Help in using this publication and additional information are available at the local office of the Natural Resources Conservation Service or the Cooperative Extension Service.

William D. Goddard
State Conservationist
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Soil Survey of Washoe County, Nevada, Central Part

By Edward W. Blake, Natural Resources Conservation Service

Fieldwork by Edward W. Blake, Carl M. Hasty, James F. Spear, Carole E. Jett, and H. David Pickel, Natural Resources Conservation Service

United States Department of Agriculture, Natural Resources Conservation Service, in cooperation with
the United States Department of the Interior, Bureau of Land Management and Bureau of Indian Affairs, and University of Nevada, Agricultural Experiment Station

This survey area is in the northwestern part of Nevada (fig. 1). It has an area of 1,492,538 acres. It is bordered on the west by Lassen County, California, and on the east by Humboldt and Pershing Counties, Nevada. The southern part of the county is included in the "Soil Survey of Washoe County, Nevada, South Part," which was published in 1983.

The public land in the survey area is administered by the United States Department of the Interior, Bureau of Land Management and Bureau of Indian Affairs.

General Nature of the Survey Area

This section gives general information about the survey area. It describes water supply, economic enterprises, transportation facilities, history, drainage, soil landscapes, geology, and climate.

Water Supply

Dorothy Palmer, agricultural engineer, Natural Resources Conservation Service, helped prepare this section.

The largest body of water in the survey area is Pyramid Lake, which is within the Pyramid Lake Indian Reservation. The main source of water for Pyramid Lake is the Truckee River. Small tributaries on the east side of the Virginia Mountain Range also drain into the lake. These tributaries are supplied by spring runoff and convection storms. Pyramid Lake is used mainly for recreation. It also provides habitat for Lahontan cutthroat trout and for cui-ui, an endangered fish species.

The sources of water for the Hualapai farming area are surface runoff and ground water. About 60 percent of the runoff in the survey area occurs as streamflow. After the distribution of seasonal runoff and the infiltration losses along the flow path, about 10 percent of this runoff arrives at points of use. About 40 percent of the runoff in the survey area occurs as local sheet flow, which is not available for use.

Because streamflow is an unpredictable source of water, ground-water wells provide most of the water for agricultural and domestic uses. The depth of these wells varies, depending on the location. Natural springs along the west side of the Granite Range have been developed for irrigation. Also, they are the main source of water for Gerlach.

The source of water for the Buffalo Hills and the Fox Range is the intermittent streamflow provided by spring runoff and convection storms. Smoke and Buffalo Creeks, which are perennial streams in the Buffalo Hills, are sources of irrigation water for some pastures. Because of a lack of upstream water control, most of the runoff from the streamflow eventually ends up on playas, where it evaporates. Natural springs in the mountain ranges throughout the survey area have been developed to provide water for livestock.

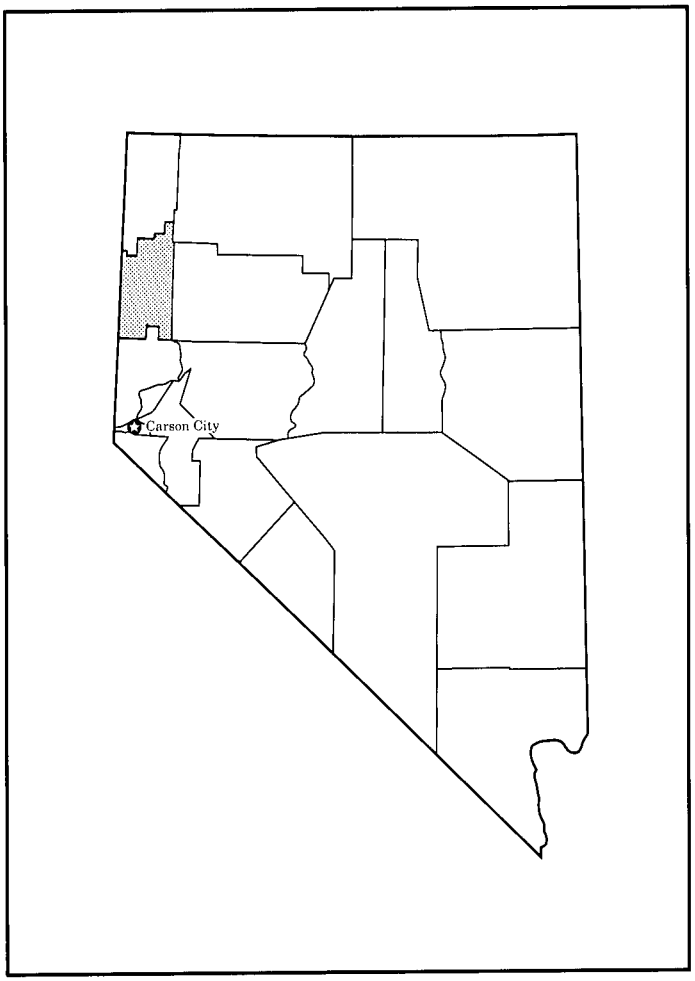

Figure 1.—Location of Washoe County, Central Part, in Nevada.

Economic Enterprises

John Capurro, district conservationist, Natural Resources Conservation Service, wrote this section.

The main source of employment in manufacturing in the survey area is U.S. Gypsum, which is at Empire, Nevada. For many years, this company has been a major part of the economy of the survey area.

Tourism and gaming make up a small part of the local economy. Gaming revenues are derived mainly from hunting and fishing enthusiasts who pass through Gerlach on their way to the northern part of Washoe County.

Rising prices for precious metals have renewed interest in mining in the general vicinity of the survey area. A large mine adjacent to the northern boundary of the survey area has been in production in recent years. A smaller mine at the northern end of the Lake Range is scheduled to begin production.

Irrigated crop production in the survey area is limited mainly to areas of the Haulapai Valley, the San Emidio Desert, and the extreme eastern part of Honey Lake Valley. Irrigation water for these areas is provided by deep wells and is applied by sprinkler systems. The available water supply limits agricultural production. Therefore, most of the land in these areas is used for livestock grazing.

Transportation Facilities

John Capurro, district conservationist, Natural Resources Conservation Service, wrote this section.

This survey area is sparsely populated. Most inhabited areas are in remote locations. Consequently, motor vehicles are the primary means of transportation. The existing network of unpaved, improved, all-weather roads serves most of the survey area. State Route 34, a paved highway, provides the primary access to Gerlach. State Route 81 connects Gerlach to Cedarville, California, to the northwest. A railroad crosses the survey area from east to west. Trains make periodic stops in Gerlach.

History

Charles Welch, civil engineering technician, Natural Resources Conservation Service, wrote this section.

The original inhabitants of this survey area were the Paiute Indians. John C. Fremont was the first explorer of the area to make recorded observations. He led a party on an expedition to find the legendary Buenaventura River. This river was thought to flow from the Rocky Mountains to San Francisco Bay.

The Applegate Road and Noble Trail were early routes winding westward through the survey area. They were traveled by thousands of emigrants to northern California. The Applegate Road brushes the northeast corner of the survey area. Noble Trail crosses Black Rock and Smoke Creek Deserts. In 1854, John Dreibelbis surveyed and mapped both of these deserts for the Pacific Railroad.

Gerlach and Empire are the only communities in the survey area. Founded in 1906, Gerlach was named after the Gerlach Land and Livestock Company. At one time all of Gerlach was owned by the railroad, which was then the mainstay of the local economy. Local citizens later purchased the land and buildings from the railroad. Empire is about 5 miles south of Gerlach, near a gypsum mine.

The early economy of the survey area was based mainly on ranching and on some mining. Also, the railroad provided many jobs. The earliest large cattle ranches were the Miller Ranch, the Lux Ranch, and the

CHART 1.—CLASSIFICATION OF BOLSON LANDFORMS

Landforms			Parts of landforms	
I Major physiographic part	II Major landform	III Component landform	IV Landform element	V Slope component
Bounding mountains				
Piedmont slope	Alluvial fan	Fan collar	Channel	
		Erosional fan remnant	Summit	
			Side slope	Shoulder slope
				Back slope
				Foot slope
		Inset fan	Channel	
	Fan piedmont	Erosional fan remnant	Summit	
			Side slope	Shoulder slope
				Back slope
				Foot slope
			Partial ballena	Crest
				Shoulder slope
				Back slope
			Channel	
		Inset fan	Channel	
		Fan apron	Channel	
		Nonburied fan remnant	Channel	
	Fan skirt		Channel	
Basin floor (bolson floor)	Alluvial flat	Alluvial flat remnant	Channel	
	Alluvial plain			
	Sand sheet	Sand dune	Interdune flat	
	Beach plain	Offshore bar		
		Barrier bar		
		Lagoon	Channel	
	Lake plain	Lake-plain terrace	Channel	
	Playa	Flood-plain playa	Channel	

Gerlach Land and Livestock Company. They were established by the 1880's.

Drainage

Water from most of the tributaries in the survey area eventually ends up on bolson floors. The mainly intermittent flow of these streams derives from spring runoff and from convection storms in summer. In contrast, the streams on the eastern side of the Virginia Mountains flow into Pyramid Lake.

Soil Landscapes

The landforms in the survey area consist of numerous north-south oriented mountain ranges, valleys, and volcanic plateaus. Elevations range from 9,200 feet in the mountains to 3,800 feet in the valleys.

The shapes, genetic relationships, and geographic scales of the topography observed in the field are used to classify the landforms in the survey area *(14)*. The two general classes—bolson and semibolson—are successively divided into smaller and genetically more homogeneous classes (charts 1 and 2). The broadest class is major physiographic parts, each of which is made up of several genetically related major landforms. These landforms in turn may consist of several genetically related component landforms. The component landforms are the smallest single units considered in combined terms of their form, constituent materials, and genetic history. Some component landforms, such as fan piedmont remnants, have distinctive topographic parts with quite different geomorphic histories. These parts are called landform elements. The landform elements that are erosional surfaces are subdivided into slope components.

In the section "General Soil Map Units," landscape positions are given for each of the major components. These generally are major physiographic parts, major landforms, or component landforms. In the section

CHART 2.—CLASSIFICATION OF SEMIBOLSON LANDFORMS

Landforms			Parts of landforms	
I Major physiographic part	II Major landform	III Component landform	IV Landform element	V Slope component
Bounding mountains				
Piedmont slope	Ballena	.....	.....	Crest Shoulder slope Back slope Foot slope
			Channel	
		Inset fan	Channel	
	Alluvial fan	Fan collar	Channel	
		Erosional fan remnant	Summit	
			Side slope	Shoulder slope Back slope Foot slope
	Fan piedmont	Erosional fan remnant	Summit	
			Side slope	Shoulder slope Back slope Foot slope
			Partial ballena	Crest Shoulder slope Back slope Foot slope
			Channel	
		Inset fan	Channel	
		Fan apron	Channel	
	Fan skirt	.....	Channel	
Basin floor (semibolson floor)	Alluvial flat	Relict alluvial flat	Channel	
		Recent alluvial flat	Channel	
	Alluvial plain	Basin-floor remnant	Summit	
			Side slope	Shoulder slope Back slope Foot slope
			Channel	
		Inset fan	Channel	
	Sand sheet	Sand dune		
	Axial-stream flood plain	Flood plain	Channel	
		Stream terrace	Summit	
			Side slope	

"Detailed Soil Map Units," broad landscape positions are specified for each map unit in the description of map unit setting. These are major physiographic parts or major landforms. Landscape positions also are given for each major component and contrasting inclusion in the map unit. These generally are component landforms, landform elements, or slope components.

Geology

The geology of the survey area is complex. The major rock types in the area are volcanic flow rocks, which are dominantly basalt and lesser amounts of andesite and breccia. These rocks are generally Tertiary in age. Although they are throughout the survey area, they are dominantly in the Buffalo Hills, the Virginia Mountains, and the Fox and Lake Ranges. Examples of soils that formed in material weathered from these rocks are the Jaybee, Old Camp, and Oppio soils at the lower elevations; the Devada, Tunnison, Dosie, and Wylo soils at the middle elevations; and the Home Camp, Newlands, Ninemile, Hutchley, and Thulepah soils at the higher elevations.

In the northern and western parts of the survey area, tuff commonly underlies these flows. The tuff is commonly exposed on escarpments or in areas where

the basalt cap has been eroded away. Verdico, Chalco, and Corral are examples of soils that formed in material weathered from this rock.

The granitic rocks in the survey area are chiefly granodiorite and some quartz monzonite. They are Cretaceous in age and are correlative with the Sierra Nevada batholith. These rocks are dominant in the southern part of the Granite Range and are less abundant in the Virginia Mountains and the Fox Range. Examples of soils that formed in material weathered from these rocks are the Slocave and Kaffur soils at the lower elevations; the Graufels, Glenbrook, Berit, Deanran, and Noslo soils at the middle elevations; and the Hastee, Granipeak, Squawval, and Tosp soils at the higher elevations.

The metamorphic rocks in the survey area consist mainly of phyllite and schist. These rocks are Jurassic in age and are mainly in the Fox Range. Examples of soils that formed in material weathered from these rocks are Coppereid, Foxcan, Kreza, and Sojur soils.

The most extensive geologic unit in the survey area consists of Pleistocene and Holocene lacustrine sediments that make up the valley floors of the Smoke Creek Desert, the San Emidio Desert, Hualapai Flat, Winnemucca Lake, and Honey Lake Valley. These lake sediments consist mainly of clay and silt. They are in and adjacent to playas. Examples of soils that formed in these sediments are the Ragtown, Umberland, and Dedmount soils on lake plain terraces along playa margins. The lacustrine sediments are coarser textured along the higher lake plain terraces. Examples of soils that formed in these coarser textured sediments are Mazuma, Swingler, and Smaug on middle lake plain terraces. Trocken, Bluewing, and Veta are examples of soils that formed in the coarser textured lacustrine sediments of Holocene age on the higher lake plain terraces and alluvial fans.

Climate

In Washoe County, summers are hot, especially at the lower elevations, and winters are cold. At the lower elevations, precipitation is normally light during all months of the year and the land is used mainly for range. At the higher elevations, precipitation is much greater and snow accumulates to a considerable depth. Some of the snowmelt irrigates crops in nearby valleys. Climatic data for Cedarville, California, and for Nixon, Sand Pass, and Reno, Nevada, reflect the climatic diversity of the survey area.

Table 1 gives data on temperature and precipitation for the survey area as recorded at Cedarville, California, and at Nixon, Reno, and Sand Pass, Nevada. Table 2 shows probable dates of the first freeze in fall and the last freeze in spring. Table 3 provides data on the length of the growing season.

In winter, the average temperature is 33 degrees F and the average daily minimum temperature is 22 degrees F. In summer, the average temperature is 69 degrees F and the average daily maximum temperature is 87 degrees F.

Growing degree days are shown in table 1. They are equivalent to "heat units." Beginning in spring, growing degree days accumulate by the amount that the average temperature each day exceeds a base temperature (40 degrees F). The normal monthly accumulation is used to schedule single or successive plantings of a crop between the last freeze in spring and the first freeze in fall.

The total annual precipitation is about 6 inches at Nixon, Nevada; 7 inches at Sand Pass and Reno, Nevada; and 13 inches at Cedarville, California. About 33 percent of the total usually falls from April through September. The growing season for most crops falls within this period.

How This Survey Was Made

This survey was made to provide information about the soils and miscellaneous areas in the survey area. The information includes a description of the soils and miscellaneous areas and their location and a discussion of their suitability, limitations, and management for specified uses. Soil scientists observed the steepness, length, and shape of slopes; the landforms; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They dug many holes to study the soil profile, which is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed. The unconsolidated material is devoid of roots and other living organisms. It has not been changed by other biological activity.

The soils and miscellaneous areas in the survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind or segment of the landscape. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landscape, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Individual soils on the landscape commonly merge into one another as their characteristics gradually

change. To construct an accurate map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. The system of taxonomic classification used in the United States is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

The descriptions, names, and delineations of the soils on the maps of this survey area do not fully agree with those on the maps of adjacent survey areas. Differences result from a better knowledge of soils, modifications in series concepts, and variations in the intensity of mapping or the extent of soils within the survey areas.

General Soil Map Units

The general soil map at the back of this publication shows broad areas that have a distinctive pattern of soils, relief, and drainage. Each map unit on the general soil map is a unique natural landscape. Typically, it consists of one or more major soils or miscellaneous areas and some minor soils or miscellaneous areas. It is named for the major soils or miscellaneous areas. The soils or miscellaneous areas making up one unit can occur in another but in a different pattern.

The general soil map can be used to compare the suitability of large areas for general land uses. Areas of suitable soils or miscellaneous areas can be identified on the map. Likewise, areas that are not suitable can be identified.

Because of its small scale, the map is not suitable for planning the management of a farm or field or for selecting a site for a road, building, or other structure. The soils in any one map unit differ from place to place in slope, depth, drainage, and other characteristics that affect management.

In the descriptions of the general soil map units, a landscape position for each major component is specified. The landscape components are generally selected from the more general categories—major physiographic parts (such as mountains), major landforms (such fan piedmonts), or component landforms (such as inset fans).

The 19 general map units in this survey area have been grouped into general kinds of landscapes for broad interpretive purposes.

Areas Dominated by Soils and Playas on Bolson Floors, Inset Fans, and Alluvial Fans

This group consists of six map units. It makes up about 36 percent of the survey area.

1. Playas

This map unit consists of very deep, nearly level, very poorly drained soils on the lowest part of lake plains. Elevations are 3,800 to 4,000 feet. The average annual precipitation is 5 to 7 inches. The average annual air temperature is 50 to 52 degrees F. The frost-free period is 120 to 130 days.

This map unit makes up about 12 percent of the survey area.

Playas are typically stratified and moderately fine textured or fine textured throughout. They are strongly saline and sodic. They are ponded after winter and spring rains or after summer convection storms. The Playas are barren.

This map unit is used mainly for recreation.

2. Mazuma-Ragtown-Trocken

This map unit consists of very deep, nearly level to moderately sloping, moderately well drained or well drained soils on lake plain terraces. Elevations are 3,800 to 4,400 feet. The average annual precipitation is 5 to 7 inches. The average annual air temperature is 50 to 52 degrees F. The frost-free period is 120 to 130 days.

This map unit makes up about 12 percent of the survey area.

Mazuma and similar soils are very deep, nearly level or gently sloping, and well drained. They are on lake plain terraces. Typically, the surface layer is medium textured or moderately coarse textured. The substratum is stratified and moderately coarse textured. These soils support mainly shadscale, bud sagebrush, bottlebrush squirreltail, and black greasewood.

Ragtown and similar soils are very deep, nearly level, and moderately well drained. They are on the lower lake plain terraces. Typically, they have a moderately fine textured surface layer and a fine textured substratum. They support mainly black greasewood and shadscale.

Trocken and similar soils are very deep, gently sloping or moderately sloping, and well drained. They are on the upper lake plain terraces. Typically, they have a moderately coarse textured surface layer and a stratified, moderately coarse textured substratum. They support mainly shadscale, bud sagebrush, and bottlebrush squirreltail.

Of minor extent in this map unit are Smaug, Isolde, Umberland, Veta, Voltaire, and Zorravista soils. Smaug soils are on the higher lake plain terraces. They support mainly winterfat. Isolde soils are on dunes

superimposed on lake plain terraces. They support mainly black greasewood and Indian ricegrass. Umberland soils are on the lowest lake plain terraces. They support mainly inland saltgrass, black greasewood, and iodinebush. Veta soils are on alluvial fans. They support mainly Wyoming big sagebrush, spiny hopsage, and bottlebrush squirreltail. Voltaire soils are on flood plains. They support mainly Nevada bluegrass and meadow barley. Zorravista soils are on dunes superimposed on lake plain terraces. They support mainly basin big sagebrush and Indian ricegrass.

This map unit is used mainly for rangeland and wildlife habitat.

3. Trocken-Bluewing

This map unit consists of very deep, moderately sloping or strongly sloping, well drained or excessively drained soils on lake plain terraces and inset fans. Elevations are 3,800 to 4,400 feet. The average annual precipitation is 5 to 7 inches. The average annual air temperature is 50 to 52 degrees F. The frost-free period is 120 to 130 days.

This map unit makes up about 3 percent of the survey area.

Trocken and similar soils are very deep, gently sloping or strongly sloping, and well drained. They are on the upper lake plain terraces. Typically, they have a moderately coarse textured surface layer and a stratified, moderately coarse textured substratum. They support mainly shadscale, Bailey greasewood, bud sagebrush, and bottlebrush squirreltail.

Bluewing and similar soils are very deep, gently sloping to strongly sloping, and excessively drained. They are on inset fans. Typically, they have a coarse textured surface layer and a stratified, coarse textured substratum. They support mainly shadscale, bud sagebrush, and bottlebrush squirreltail.

Of minor extent in this map unit are Ruhe, Ganaflan, and Mazuma soils on lake plain terraces and Labkey soils on barrier bars. Ruhe soils support mainly Nevada dalea, littleleaf horsebrush, and Indian ricegrass. Ganaflan soils support mainly shadscale, Bailey greasewood, bud sagebrush, and bottlebrush squirreltail. Mazuma soils support mainly shadscale and bud sagebrush. Labkey soils support mainly shadscale and bud sagebrush.

This map unit is used mainly for rangeland and wildlife habitat.

4. Typic Torriorthents-Trocken-Smaug

This map unit consists of very deep, nearly level to moderately sloping, well drained soils on lake plain terraces. Elevations are 3,800 to 4,400 feet. The average annual precipitation is 5 to 7 inches. The average annual air temperature is 50 to 52 degrees F. The frost-free period is 120 to 130 days.

This map unit makes up about 4 percent of the survey area.

Typic Torriorthents and similar soils are very deep, nearly level or gently sloping, and well drained. They are on the lake plain terraces adjacent to Pyramid Lake. Typically, the surface layer is medium textured. The substratum is stratified and is coarse textured to moderately fine textured. These soils support mainly Russian thistle and inland saltgrass.

Trocken and similar soils are very deep, nearly level to moderately sloping, and well drained. They are on lake plain terraces. Typically, they have a moderately coarse textured surface layer and a stratified, moderately coarse textured substratum. They support mainly shadscale, winterfat, and bud sagebrush.

Smaug and similar soils are very deep, nearly level to moderately sloping, and well drained. They are on lake plain terraces. Typically, they have a medium textured surface layer and a medium textured substratum. They support mainly winterfat.

Of minor extent in this map unit are Swingler and Ganaflan soils on lake plain terraces, Hawsley soils on dunes and sand sheets, and Bluewing soils on fan skirts and inset fans. Swingler soils support mainly shadscale and black greasewood. Ganaflan soils support mainly shadscale and bud sagebrush. Hawsley soils support mainly littleleaf horsebrush, Nevada dalea, and Indian ricegrass. Bluewing soils support mainly shadscale and bud sagebrush.

This map unit is used mainly for rangeland and wildlife habitat.

5. Juva-Umberland-Mazuma

This map unit consists of very deep, nearly level and gently sloping, somewhat poorly drained or well drained soils on alluvial fans and lake plain terraces. Elevations are 3,900 to 4,200 feet. The average annual precipitation is 5 to 7 inches. The average annual air temperature is 50 to 52 degrees F. The frost-free period is 120 to 130 days.

This map unit makes up about 2 percent of the survey area.

Juva and similar soils are very deep, nearly level, and well drained. They are on alluvial fans. Typically, they have a moderately coarse textured surface layer and a stratified, moderately coarse textured substratum. They support mainly alfalfa in irrigated areas and Bailey greasewood, shadscale, and bud sagebrush in native areas.

Umberland and similar soils are very deep, nearly level, and somewhat poorly drained. They are on lake

plain terraces. Typically, they have a moderately fine textured surface layer and a fine textured substratum. They support mainly inland saltgrass, Torrey quailbush, black greasewood, and basin wildrye.

Mazuma and similar soils are very deep, nearly level to gently sloping, and well drained. They are on lake plain terraces. Typically, they have a medium textured surface layer and a stratified, moderately coarse textured substratum. They support mainly Bailey greasewood, shadscale, and bud sagebrush.

Of minor extent in this map unit are Benin, Slaw, and Jerval soils. Benin soils are on lake plain terraces. They support mainly Torrey quailbush, black greasewood, and basin wildrye. Slaw soils are on alluvial flats. They support mainly Torrey quailbush, black greasewood, and basin wildrye. Jerval soils are on the higher lake plain terraces. They support mainly Bailey greasewood, shadscale, and bud sagebrush.

This map unit is used mainly for rangeland, wildlife habitat, and cropland.

6. Gitakup-Chuckles-Ragtown

This map unit consists of very deep, nearly level, moderately well drained soils on lake plain terraces. Elevations are 3,900 to 4,000 feet. The average annual precipitation is 5 to 7 inches. The average annual air temperature is 50 to 52 degrees F. The frost-free period is 120 to 130 days.

This map unit makes up about 3 percent of the survey area.

Gitakup and similar soils are very deep, nearly level, and moderately well drained. They are on lake plain terraces. Typically, they have a moderately fine textured surface layer, a fine textured subsoil, and a moderately fine textured substratum. They support mainly shadscale, bud sagebrush, and bottlebrush squirreltail.

Chuckles and similar soils are very deep, nearly level, and moderately well drained. They are on lake plain terraces. Typically, they have a medium textured surface layer and a medium textured substratum. They support mainly shadscale, black greasewood, and bud sagebrush.

Ragtown and similar soils are very deep, nearly level, and moderately well drained. They are on the lower lake plain terraces. Typically, they have a moderately fine textured surface layer and a fine textured substratum. They support mainly black greasewood.

Of minor extent in this map unit are Playas and Umberland, Dun Glen, and Zorravista soils. Playas are on the lowest part of lake plains. They are barren. Umberland soils are on the lower lake plain terraces. They support mainly inland saltgrass. Dun Glen soils are on the higher lake plain terraces. They support mainly shadscale, bud sagebrush, and bottlebrush squirreltail. Zorravista soils are on dunes superimposed on lake plain terraces and alluvial fans. They support mainly basin big sagebrush and Indian ricegrass.

This map unit is used mainly for rangeland and wildlife habitat. Scattered small areas are used for urban development.

Areas Dominated by Soils on Fan Piedmonts, Alluvial Fans, and Lake Plains

This group consists of four map units. It makes up about 7 percent of the survey area.

7. Jerval-Dorper

This map unit consists of very deep, gently sloping to strongly sloping, well drained soils on fan piedmonts. Elevations are 4,400 to 4,900 feet. The average annual precipitation is 6 to 8 inches. The average annual air temperature is 50 to 52 degrees F. The frost-free period is 120 to 130 days.

This map unit makes up about 1 percent of the survey area.

Jerval and similar soils are very deep, gently sloping to strongly sloping, and well drained. They are on fan piedmont remnants. Typically, they have a medium textured surface layer, a moderately fine textured subsoil, and a moderately coarse textured substratum. They support mainly shadscale, bud sagebrush, and bottlebrush squirreltail.

Dorper and similar soils are very deep, gently sloping or moderately sloping, and well drained. They are on fan piedmont remnants. Typically, they have a medium textured surface layer, a fine textured subsoil, and a moderately coarse textured substratum. They support mainly shadscale, bud sagebrush, and bottlebrush squirreltail.

Of minor extent in this map unit are Kumiva, Toulon, and Shawave soils. Kumiva soils are on inset fans. They support mainly shadscale, bud sagebrush, and bottlebrush squirreltail. Toulon soils are on beach bars at the lower elevations. They support mainly shadscale, bud sagebrush, and bottlebrush squirreltail. Shawave soils are on the higher fan piedmont remnants. They support mainly Wyoming big sagebrush, Sandberg bluegrass, and bottlebrush squirreltail.

This map unit is used mainly for rangeland and wildlife habitat.

8. Buffaran-Fulstone-Phing

This map unit consists of shallow and very deep, gently sloping to strongly sloping, well drained soils on fan piedmonts. Elevations are 4,300 to 5,400 feet. The average annual precipitation is 8 to 10 inches. The average annual air temperature is 48 to 50 degrees F. The frost-free period is 100 to 110 days.

This map unit makes up about 2 percent of the survey area.

Buffaran and similar soils are shallow, gently sloping to strongly sloping, and well drained. They are on fan piedmont remnants. Typically, they have a stony, medium textured surface layer; a fine textured subsoil; and a strongly cemented duripan. They support mainly Wyoming big sagebrush, bottlebrush squirreltail, and Sandberg bluegrass.

Fulstone and similar soils are shallow, gently sloping or moderately sloping, and well drained. They are on fan piedmont remnants. Typically, they have a very stony, medium textured surface layer; a fine textured subsoil; and an indurated duripan. They support mainly Lahontan sagebrush, bottlebrush squirreltail, and Sandberg bluegrass.

Phing and similar soils are very deep, gently sloping or moderately sloping, and well drained. They are on fan piedmont remnants. Typically, they have a stony, moderately coarse textured surface layer; a fine textured subsoil; and a stratified, moderately coarse textured and coarse textured substratum.

Of minor extent in this map unit are Corral, Jaybee, and Cleaver soils. Corral soils are on the side slopes of old lake terraces or pediment remnants. They support mainly Wyoming big sagebrush, Sandberg bluegrass, and bottlebrush squirreltail. Jaybee soils are on hill and plateau remnants. They support mainly Lahontan sagebrush, Sandberg bluegrass, and bottlebrush squirreltail. Cleaver soils are on the lower fan piedmont remnants. They support mainly shadscale, bud sagebrush, and bottlebrush squirreltail.

This map unit is used mainly for rangeland and wildlife habitat.

9. Veta-Haybourne

This map unit consists of very deep, gently sloping and moderately sloping, well drained soils on alluvial fans and lake plains. Elevations are 4,000 to 4,400 feet. The average annual precipitation is 8 to 10 inches. The average annual air temperature is 49 to 51 degrees F. The frost-free period is 100 to 110 days.

This map unit makes up about 3 percent of the survey area.

Veta and similar soils are very deep, gently sloping or moderately sloping, and well drained. They are on alluvial fans and lake plain terraces. Typically, they have a moderately coarse textured surface layer and subsoil and a stratified, moderately coarse textured substratum. They support mainly Wyoming big sagebrush, bottlebrush squirreltail, and Sandberg bluegrass.

Haybourne and similar soils are very deep, gently sloping or moderately sloping, and well drained. They are on alluvial fans and lake plain terraces. Typically, they have a moderately coarse textured surface layer, subsoil, and substratum. They support mainly Wyoming big sagebrush, bottlebrush squirreltail, and Sandberg bluegrass.

Of minor extent in this map unit are Langston, Trocken, Zorravista, Fulstone, and Kayo soils. Langston soils are on alluvial fan remnants and high lake terraces. They support mainly Wyoming big sagebrush, bottlebrush squirreltail, and Sandberg bluegrass. Trocken soils are on the lower alluvial fans and lake terraces. They support mainly shadscale and bud sagebrush. Zorravista soils are on dunes. They support mainly basin big sagebrush and Indian ricegrass. Fulstone soils are on alluvial fan remnants and fan piedmont remnants. They support mainly Lahontan sagebrush and Sandberg bluegrass. Kayo soils are on alluvial fans. They support mainly Wyoming big sagebrush and bottlebrush squirreltail.

This map unit is used mainly for rangeland and wildlife habitat.

10. Leviathan-Haybourne-Springmeyer

This map unit consists of very deep, nearly level to strongly sloping, well drained soils on alluvial fans and fan piedmonts. Elevations are 4,200 to 5,600 feet. The average annual precipitation is 9 to 11 inches. The average annual air temperature is 47 to 50 degrees F. The frost-free period is 90 to 110 days.

This map unit makes up about 1 percent of the survey area.

Leviathan and similar soils are very deep, moderately sloping or strongly sloping, and well drained. They are on fan piedmont remnants. Typically, they have a very stony, moderately coarse textured surface layer and a moderately fine textured subsoil. They support mainly mountain big sagebrush and bluebunch wheatgrass.

Haybourne and similar soils are very deep, nearly level to moderately sloping, and well drained. They are on the lower fan piedmont remnants. Typically, they have a coarse textured surface layer and a moderately coarse textured subsoil and substratum. They support mainly Wyoming big sagebrush and bottlebrush squirreltail.

Springmeyer and similar soils are very deep, gently sloping or moderately sloping, and well drained. They are on the higher inset fans. Typically, they have a very stony, moderately coarse textured surface layer and a moderately fine textured subsoil and substratum. They support mainly mountain big sagebrush and bluebunch wheatgrass.

Of minor extent in this map unit are Mottsville, Incy, and Barnard soils. Mottsville soils are on fan collars and fan aprons. They support mainly mountain big

sagebrush, antelope bitterbrush, needleandthread, and Indian ricegrass. Incy soils are on dunes. They support mainly Anderson peachbrush, antelope bitterbrush, and needleandthread. Barnard soils are on fan piedmont remnants. They support mainly mountain big sagebrush and bluebunch wheatgrass.

This map unit is used mainly for rangeland and wildlife habitat.

Areas Dominated by Soils and Rock Outcrop on Hills and Low Plateaus

This group consists of three map units. It makes up about 19 percent of the survey area.

11. Slocave-Kaffur-Rock Outcrop

This map unit consists of very shallow, steep and very steep, well drained soils on hills. Elevations are 4,300 to 5,800 feet. The average annual precipitation is 6 to 10 inches. The average annual air temperature is 48 to 51 degrees F. The frost-free period is 90 to 110 days.

This map unit makes up about 1 percent of the survey area.

Slocave and similar soils are very shallow, steep or very steep, and well drained. They are on the side slopes of hills. Typically, they are moderately coarse textured throughout and are underlain by granitic bedrock. They support mainly shadscale, desert needlegrass, and littleleaf horsebrush.

Kaffur and similar soils are very shallow, steep or very steep, and well drained. They are on the side slopes of hills. Typically, they are moderately coarse textured throughout and are underlain by granitic bedrock. They support mainly Lahontan sagebrush, bluegrass, and Utah juniper.

Rock outcrop is in scattered areas throughout the map unit. It is barren.

Of minor extent in this map unit are Arclay and Jaybee soils. Arclay soils are on the steep, north-facing side slopes of hills. They support mainly Lahontan sagebrush and Thurber needlegrass. Jaybee soils are on hills of volcanic rock. They support mainly Lahontan sagebrush and bluegrass.

This map unit is used mainly for rangeland and wildlife habitat.

12. Coppereid-Foxcan-Sojur

This map unit consists of very shallow, strongly sloping to very steep, well drained soils on hills. Elevations are 4,400 to 6,000 feet. The average annual precipitation is 8 to 10 inches. The average annual air temperature is 48 to 51 degrees F. The frost-free period is 90 to 110 days.

This map unit makes up about 3 percent of the survey area.

Coppereid and similar soils are very shallow, strongly sloping to steep, and well drained. They are on the side slopes of hills. Typically, they are moderately coarse textured throughout and are underlain by shale bedrock. They support mainly Lahontan sagebrush, Sandberg bluegrass, and bottlebrush squirreltail.

Foxcan and similar soils are very shallow, very steep, and well drained. They are on the back slopes of hills. Typically, they are medium textured throughout and are underlain by shale bedrock. They support mainly Wyoming big sagebrush, Utah juniper, and Thurber needlegrass.

Sojur and similar soils are very shallow, very steep, and well drained. They are on the back slopes of hills. Typically, they are medium textured throughout and are underlain by phyllite bedrock. They support mainly shadscale.

Of minor extent in this map unit are Kreza and Phliss soils on the crests and shoulders of hills and Rock outcrop in scattered areas throughout the unit. Kreza soils support mainly Lahontan sagebrush and Sandberg bluegrass. Phliss soils support mainly Wyoming big sagebrush and Sandberg bluegrass. Rock outcrop is barren.

This map unit is used mainly for rangeland and wildlife habitat.

13. Jaybee-Old Camp-Pickup

This map unit consists of very shallow to moderately deep, moderately sloping to steep, well drained soils on hills and low plateaus. Elevations are 4,300 to 6,000 feet. The average annual precipitation is 8 to 12 inches. The average annual air temperature is 47 to 50 degrees F. The frost-free period is 80 to 100 days.

This map unit makes up about 15 percent of the survey area.

Jaybee and similar soils are very shallow or shallow, moderately sloping to moderately steep, and well drained. They are on the crests and shoulders of hills and on the summits and shoulders of low plateaus. Typically, they have a very cobbly, moderately coarse textured surface layer and a moderately fine textured subsoil and are underlain by volcanic bedrock. They support mainly Lahontan sagebrush, Sandberg bluegrass, and Thurber needlegrass.

Old Camp and similar soils are shallow, moderately steep or steep, and well drained. They are on the side slopes of hills and low plateaus. Typically, they have a very stony, medium textured surface layer and a moderately fine textured subsoil and are underlain by volcanic bedrock. They support mainly Wyoming big

sagebrush, Sandberg bluegrass, and Thurber needlegrass.

Pickup and similar soils are moderately deep, moderately steep or steep, and well drained. They are on the north-facing side slopes of hills and low plateaus. Typically, they have a very stony, medium textured surface layer and a fine textured subsoil and are underlain by volcanic bedrock. They support mainly Lahontan sagebrush and bluebunch wheatgrass.

Of minor extent in this map unit are Reywat soils, Rock outcrop, and Theon soils. Reywat soils are on the upper, north-facing side slopes of hills and plateaus. They support mainly mountain big sagebrush and bluebunch wheatgrass. Rock outcrop is in scattered areas throughout the unit. It is barren. Theon soils are on the lower side slopes of hills and plateaus. They support mainly shadscale.

This map unit is used mainly for rangeland and wildlife habitat.

Areas Dominated by Soils and Rock Outcrop on Mountains and Plateaus

This group consists of six map units. It makes up about 38 percent of the survey area.

14. Devada-Tunnison-Softscrabble

This map unit consists of shallow to very deep, nearly level to steep, well drained soils on mountains and plateaus. Elevations are 5,000 to 6,200 feet. The average annual precipitation is 10 to 14 inches. The average annual air temperature is 45 to 50 degrees F. The frost-free period is 65 to 90 days.

This map unit makes up about 20 percent of the survey area.

Devada and similar soils are shallow, nearly level to moderately steep, and well drained. They are on the summits and shoulders of plateaus and on the crests and shoulders of mountains. Typically, they have a very stony, medium textured surface layer and a fine textured subsoil and are underlain by volcanic bedrock. They support mainly low sagebrush, Thurber needlegrass, and bluebunch wheatgrass.

Tunnison and similar soils are moderately deep, nearly level to moderately steep, and well drained. They are on the summits and shoulders of plateaus. Typically, they have a very cobbly, fine textured surface layer and fine textured underlying material. They are underlain by volcanic bedrock. They support mainly low sagebrush, Sandberg bluegrass, and Hooker balsamroot.

Softscrabble and similar soils are very deep, strongly sloping to steep, and well drained. They are on the side slopes of mountains and plateaus. Typically, they have a stony, medium textured surface layer and a medium textured or moderately fine textured subsoil and are underlain by volcanic bedrock. They support mainly mountain big sagebrush, bluebunch wheatgrass, and Thurber needlegrass.

Of minor extent in this map unit are Pickup, Reywat, Chalco, Boulder Lake, and Hart Camp soils. Pickup and Reywat soils are on the lower side slopes of mountains and plateaus. Pickup soils support mainly Lahontan sagebrush and bluebunch wheatgrass. Reywat soils support mainly mountain big sagebrush and bluebunch wheatgrass. Chalco soils are on the lower side slopes of plateaus and pediment remnants. They support mainly low sagebrush, Thurber needlegrass, and Sandberg bluegrass. Boulder Lake soils are in interplateau basins. They support mainly silver sagebrush, Nevada bluegrass, and Baltic rush. Hart Camp soils are on the shoulders of plateaus. They support mainly mountain big sagebrush, antelope bitterbrush, and bluebunch wheatgrass.

This map unit is used mainly for rangeland and wildlife habitat.

15. Reywat-Wylo-Old Camp

This map unit consists of shallow, moderately sloping to very steep, well drained soils on mountains and plateaus. Elevations are 4,300 to 8,000 feet. The average annual precipitation is 8 to 12 inches. The average annual air temperature is 47 to 50 degrees F. The frost-free period is 75 to 100 days.

This map unit makes up about 10 percent of the survey area.

Reywat and similar soils are shallow, moderately steep to very steep, and well drained. They are on the side slopes of mountains and plateaus. Typically, they have a very stony, medium textured surface layer and a medium textured or moderately fine textured subsoil and are underlain by volcanic bedrock. They support mainly mountain big sagebrush, bluebunch wheatgrass, and Thurber needlegrass.

Wylo and similar soils are shallow, moderately sloping to steep, and well drained. They are on the crests and side slopes of mountains and on the summits and side slopes of plateaus. Typically, they have a very stony, medium textured surface layer and a fine textured subsoil and are underlain by volcanic bedrock. They support mainly Lahontan sagebrush, bluebunch wheatgrass, and Thurber needlegrass.

Old Camp and similar soils are shallow, moderately steep or steep, and well drained. They are on the side slopes of mountains and plateaus. Typically, they have a very stony, medium textured surface layer and a medium textured or moderately fine textured subsoil and are underlain by volcanic bedrock. They support

mainly Wyoming big sagebrush, Thurber needlegrass, and Sandberg bluegrass.

Of minor extent in this map unit are Rock outcrop and Jaybee, Manogue, Glenbrook, and Theon soils. Rock outcrop is in scattered areas throughout the map unit. It is barren. Jaybee soils are on the lower plateaus and hills. They support mainly Lahontan sagebrush, Sandberg bluegrass, and Thurber needlegrass. Manogue soils are on the summits of plateaus and the crests of mountains. They support mainly Lahontan sagebrush and bottlebrush squirreltail. Glenbrook soils are on the side slopes of mountains. They support mainly Wyoming big sagebrush and desert needlegrass. Theon soils are on the lowest side slopes and crests of hills. They support mainly shadscale and bottlebrush squirreltail.

This map unit is used mainly for rangeland and wildlife habitat.

16. Softscrabble-Terca-Hutchley

This map unit consists of shallow or very deep, moderately sloping to very steep, well drained soils on mountains and plateaus. Elevations are 5,500 to 8,000 feet. The average annual precipitation is 10 to 16 inches. The average annual air temperature is 42 to 47 degrees F. The frost-free period is 65 to 90 days.

This map unit makes up 3 percent of the survey area.

Softscrabble and similar soils are very deep, moderately steep or steep, and well drained. They are on the side slopes of mountains and plateaus. Typically, they have a very stony, medium textured surface layer and a moderately fine textured subsoil and are underlain by volcanic bedrock. They support mainly mountain big sagebrush, bluebunch wheatgrass, and basin wildrye.

Terca and similar soils are shallow, moderately steep to very steep, and well drained. They are on the side slopes of mountains and plateaus. Typically, they have a very stony, medium textured surface layer and a moderately fine textured subsoil and are underlain by volcanic bedrock. They support mainly mountain big sagebrush, bluebunch wheatgrass, antelope bitterbrush, and basin wildrye.

Hutchley and similar soils are shallow, moderately sloping to moderately steep, and well drained. They are on the crests and shoulders of mountains. Typically, they have a very cobbly, moderately coarse textured surface layer and a medium textured or moderately fine textured subsoil and are underlain by volcanic bedrock. They support mainly low sagebrush and Sandberg bluegrass.

Of minor extent in this map unit are Thulepah soils, Rock outcrop, and Indiano soils. Thulepah soils are on the higher side slopes of mountains and plateaus. They support mainly mountain big sagebrush, snowberry, and mountain brome. Rock outcrop is in scattered areas throughout the map unit. It is barren. Indiano soils are on the lower side slopes of mountains and plateaus. They support mainly mountain big sagebrush, bluebunch wheatgrass, and Thurber needlegrass.

This map unit is used mainly for rangeland and wildlife habitat.

17. Graufels-Glenbrook-Rock Outcrop

This map unit consists of shallow or moderately deep, moderately steep to very steep, somewhat excessively drained soils on mountains. Elevations are 5,000 to 6,200 feet. The average annual precipitation is 10 to 14 inches. The average annual air temperature is 46 to 48 degrees F. The frost-free period is 75 to 100 days.

This map unit makes up about 1 percent of the survey area.

Graufels and similar soils are moderately deep, moderately steep or steep, and somewhat excessively drained. They are on the side slopes of mountains. Typically, they have a bouldery, coarse textured surface layer and coarse textured underlying material. They are underlain by granitic bedrock. They support mainly mountain big sagebrush, antelope bitterbrush, and needlegrass.

Glenbrook and similar soils are shallow, moderately steep to very steep, and somewhat excessively drained. They are on the side slopes of mountains. Typically, they are coarse textured throughout and are underlain by granitic bedrock. They support mainly mountain big sagebrush, green ephedra, antelope bitterbrush, and desert needlegrass.

Rock outcrop is in scattered areas throughout the map unit. It is barren.

Of minor extent in this map unit are Sumine soils on the side slopes of mountains. These soils are underlain by volcanic bedrock. They support mainly mountain big sagebrush and bluebunch wheatgrass.

This map unit is used mainly for rangeland and wildlife habitat.

18. Berit-Hastee-Rock Outcrop

This map unit consists of very shallow or deep, moderately steep to very steep, well drained or somewhat excessively drained soils on mountains. Elevations are 4,800 to 9,000 feet. The average annual precipitation is 12 to more than 16 inches. The average annual air temperature is 40 to 47 degrees F. The frost-free period is 60 to 80 days.

This map unit makes up about 2 percent of the survey area.

Berit and similar soils are very shallow, moderately steep to very steep, and somewhat excessively drained. They are on the side slopes of mountains. Typically, they have an extremely bouldery, moderately coarse textured surface layer and a moderately fine textured subsoil and are underlain by granitic bedrock. They support mainly Utah juniper, mountain big sagebrush, and bluebunch wheatgrass.

Hastee and similar soils are deep, very steep, and well drained. They are on the side slopes of mountains. Typically, they have an extremely bouldery, moderately coarse textured surface layer and coarse textured underlying material. They are underlain by granitic bedrock. They support mainly mountain big sagebrush, snowberry, mountain brome, and Columbia needlegrass.

Rock outcrop is in scattered areas throughout the map unit. It is barren.

Of minor extent in this map unit are Granipeak, Noslo, and Arclay soils. Granipeak soils are on the side slopes of mountains. They support mainly mountain big sagebrush, snowberry, and bluebunch wheatgrass. Noslo and Arclay soils are on the lower side slopes of mountains. Noslo soils support mainly Lahontan sagebrush and bluebunch wheatgrass. Arclay soils support mainly Lahontan sagebrush and Sandberg bluegrass.

This map unit is used mainly for rangeland and wildlife habitat.

19. Home Camp-Newlands-Ninemile

This map unit consists of shallow to deep, moderately sloping to moderately steep, well drained soils on mountains and plateaus. Elevations are 6,000 to 7,600 feet. The average annual precipitation is 14 to 16 inches. The average annual air temperature is 42 to 46 degrees F. The frost-free period is 60 to 75 days.

This map unit makes up about 2 percent of the survey area.

Home Camp and similar soils are moderately deep, moderately sloping to moderately steep, and well drained. They are on the side slopes of mountains and plateaus. Typically, they have a stony, medium textured surface layer and a fine textured subsoil and are underlain by volcanic bedrock. They support mainly mountain big sagebrush, bluebunch wheatgrass, and Idaho fescue.

Newlands and similar soils are deep, moderately sloping to moderately steep, and well drained. They are on the side slopes of mountains and plateaus. Typically, they have a stony, medium textured surface layer and a moderately fine textured subsoil and are underlain by volcanic bedrock. They support mainly mountain big sagebrush, bluebunch wheatgrass, and Idaho fescue.

Ninemile and similar soils are shallow, moderately sloping or strongly sloping, and well drained. They are on the crests of mountains and the summits of plateaus. Typically, they have a very stony, medium textured surface layer and a fine textured subsoil and are underlain by volcanic bedrock. They support mainly low sagebrush, bluebunch wheatgrass, and Idaho fescue.

Of minor extent in this map unit are Hart Camp, Devada, Softscrabble, and Pickup soils. Hart Camp soils are on the shoulders of plateaus. They support mainly antelope bitterbrush, mountain big sagebrush, and bluebunch wheatgrass. Devada soils are on the crests of the lower mountains and the summits of plateaus. They support mainly low sagebrush, bluebunch wheatgrass, and Thurber needlegrass. Softscrabble soils are on the lower side slopes of mountains and plateaus. They support mainly mountain big sagebrush, bluebunch wheatgrass, and basin wildrye. Pickup soils are on the lower side slopes of mountains and plateaus. They support mainly Lahontan sagebrush and bluebunch wheatgrass.

This map unit is used mainly for rangeland and wildlife habitat.

Detailed Soil Map Units

The map units on the detailed maps at the back of this soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions in this section, along with the maps, can be used to determine the suitability and potential of a unit for specific uses. The soil properties and characteristics described can be used to plan the management needed for those uses. More information about each map unit, or soil, is given under the headings "Use and Management of the Soils" and "Soil Properties."

A map unit delineation on a map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils or miscellaneous areas. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils and miscellaneous areas are natural phenomena and have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some included areas that belong to other taxonomic classes.

The presence of included areas in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into segments that have similar use and management requirements. The delineation of such landscape segments on the map provides sufficient information for the development of resource plans, but if intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soils that have profiles that are almost alike make up a *soil series*. The soils of a series have major horizons that are similar in composition, thickness, and arrangement. Soils of one series can differ in texture of the upper layer or of the underlying layers. They also can differ in slope, stoniness, salinity, wetness, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Fulstone very stony loam, 4 to 15 percent slopes, is a phase of the Fulstone series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are called complexes or associations.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Ragtown-Isolde complex, 0 to 15 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Devada-Tunnison association is an example.

This survey includes *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Playas is an example. Some areas that are too small to be delineated are identified by special symbols on the soil maps.

Table 4 gives the acreage and proportionate extent of each map unit. Other tables (see "Summary of Tables") give properties of the soils and the limitations, capabilities, and potentials for many uses.

The Glossary defines many of the terms used in describing the soils or miscellaneous areas. The following paragraphs explain some of the headings used in the map unit descriptions.

Map unit setting is given for the entire map unit. The landscape positions indicated under the heading "Map unit setting" generally are broader than those given for each major component of the map unit.

Composition is given for the major components of the

map unit and for the contrasting inclusions. Contrasting inclusions are soils or miscellaneous areas that differ from the soils or miscellaneous areas for which the unit is named. Inclusions can either be similar or contrasting. Similar inclusions are components that differ from the components for which the unit is named in ways that do not significantly affect use and management. In the "Composition" section, a single percentage is provided for a named soil and the similar inclusions because their use and management are similar. Contrasting inclusions differ from the components for which the unit is named more significantly than the similar inclusions. The differences would result in different use and management requirements if the contrasting inclusions were extensive enough to be managed separately. For most uses, contrasting inclusions have a limited effect on use and management.

Inclusions generally are in small areas and could not be mapped separately because of the scale used in mapping. Some small areas of strongly contrasting inclusions are identified by a special symbol on the detailed soil maps. A few inclusions may not have been observed and consequently are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the inclusions on the landscape.

A description of the characteristics of the major components in the map unit follows the description of composition. These characteristics include classification, position on the landscape, parent material, slope range, elevation, and dominant present vegetation. Also included are climatic data, a typical profile, and important soil and water features.

Information about the contrasting inclusions follows the description of the characteristics of the major components. This information includes classification, position on the landscape, and distinctive present vegetation.

Interpretive groups are specified at the end of the map unit descriptions. The capability classification and range site for each major component and the range site for each contrasting inclusion are identified.

120—Home Camp-Newlands association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:

- Home Camp stony loam, 4 to 30 percent slopes—60 percent
- Newlands stony loam, 4 to 30 percent slopes—25 percent

Contrasting inclusions:

- Inclusion 1: Lithic Xerollic Haplargids very gravelly clay loam, 4 to 15 percent slopes—5 percent
- Inclusion 2: Ninemile extremely cobbly loam, 0 to 8 percent slopes—5 percent
- Inclusion 3: Rock outcrop—4 percent
- Inclusion 4: Cumulic Cryaquolls loam, 8 to 15 percent slopes—1 percent

Characteristics of the Home Camp Soil

Classification: Argic Cryoborolls, clayey-skeletal, montmorillonitic
Position on landscape: Side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 4 to 30 percent
Elevation: 6,000 to 7,600 feet
Dominant present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 42 degrees F
Frost-free period: About 60 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Stony loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 17 inches
Texture: Very gravelly sandy clay loam, very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 to 26 inches
Texture: Very gravelly clay
Structure: Subangular blocky
Consistence: Slightly hard, firm
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 26 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 3.0 to 6.0 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Newlands Soil

Classification: Argic Cryoborolls, fine-loamy, mixed
Position on landscape: Side slopes of plateaus
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 4 to 30 percent
Elevation: 6,000 to 7,600 feet
Dominant present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 42 degrees F
Frost-free period: About 60 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 10 percent

Depth: 0 to 8 inches
Texture: Stony loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 41 inches
Texture: Clay loam, gravelly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 41 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 6.4 to 9.6 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Rapid
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, frigid
Position on landscape: Summits of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 2
Classification: Lithic Argixerolls, clayey, montmorillonitic, frigid
Position on landscape: Summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bluebunch wheatgrass, Idaho fescue
Inclusion 3
Position on landscape: Summits and rims of plateaus
Distinctive present vegetation: None
Inclusion 4
Classification: Cumulic Cryaquolls
Position on landscape: Side slopes of plateaus adjacent to seeps and springs
Distinctive present vegetation: Sedge, rush

Interpretive Groups

Capability classification: Home Camp and Newlands soils—VIIs, nonirrigated
Range site: Home Camp and Newlands soils—023XY007NV; Inclusion 1—023XY008NV; Inclusion 2—023XY017NV; Inclusion 3—none; Inclusion 4—023XY013NV

131—Devada-Hart Camp-Tunnison association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Devada extremely stony loam, 0 to 8 percent slopes—35 percent
• Hart Camp very stony loam, 4 to 15 percent slopes—25 percent
• Tunnison very cobbly clay, 0 to 8 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Tunnison cobbly clay, 0 to 8 percent slopes—7 percent
• Inclusion 2: Softscrabble stony loam, 15 to 50 percent slopes—6 percent
• Inclusion 3: Rock outcrop—2 percent

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex or smooth summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 0 to 8 percent
Elevation: 5,600 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 25 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 12 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Hart Camp Soil

Classification: Aridic Argixerolls, loamy, mixed, frigid, shallow
Position on landscape: Undulating shoulders of plateaus
Parent material: Residuum derived from tuff
Slope range: 4 to 15 percent
Elevation: 5,600 to 6,200 feet
Dominant present vegetation: Mountain big sagebrush, antelope bitterbrush, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 70 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 5 percent; pebbles, 5 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 13 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.7 to 3.4 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Tunnison Soil

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Smooth or slightly concave summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 0 to 8 percent
Elevation: 5,600 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 3 percent; cobbles, 40 percent; pebbles, 15 percent

Depth: 0 to 1 inch
Texture: Very cobbly clay
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 31 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 31 to 38 inches
Texture: Weathered bedrock

Depth: 38 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.3 to 5.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Summits of plateaus
Distinctive present vegetation: Rubber rabbitbrush, bottlebrush squirreltail, Hooker balsamroot
Inclusion 2
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing side slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass
Inclusion 3
Position on landscape: Summits and rims of plateaus
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Devada, Hart Camp, and Tunnison soils—VIIs, nonirrigated
Range site: Devada soil—023XY031NV; Hart Camp soil—023XY015NV; Tunnison soil—023XY044NV; Inclusion 1—023XY001NV; Inclusion 2—023XY007NV; Inclusion 3—none

133—Devada-Tunnison-Softscrabble association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Devada extremely stony loam, 2 to 15 percent slopes—45 percent
• Tunnison very cobbly clay, 2 to 8 percent slopes—25 percent
• Softscrabble stony loam, 15 to 30 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Lithic Xerollic Haplargids very gravelly loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Lithic Xerollic Camborthids very stony clay, 2 to 8 percent slopes—5 percent
• Inclusion 3: Hart Camp stony loam, 4 to 15 percent slopes—3 percent
• Inclusion 4: Rock outcrop—2 percent

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 2 to 15 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 25 percent; pebbles, 20 percent

Depth: 0 to 4 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Tunnison Soil

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits and side slopes of plateaus
Parent material: Residuum derived from basalt
Slope range: 2 to 8 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 3 percent; cobbles, 40 percent; pebbles, 15 percent

Depth: 0 to 1 inch
Texture: Very cobbly clay
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 24 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 to 34 inches
Texture: Weathered bedrock

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.3 to 5.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing, concave side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 30 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Stony loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Slightly convex summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Hooker balsamroot

Inclusion 2
Classification: Lithic Xerollic Camborthids, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Utah juniper

Inclusion 3
Classification: Aridic Argixerolls, loamy, mixed, frigid, shallow
Position on landscape: North-facing, rolling side slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, antelope bitterbrush, bluebunch wheatgrass

Inclusion 4
Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Devada and Tunnison soils—VIIs, nonirrigated; Softscrabble soil—VIIe, nonirrigated
Range site: Devada soil—023XY031NV; Tunnison soil—023XY044NV; Softscrabble soil—023XY041NV; Inclusion 1—023XY021NV; Inclusion 2—023XY035NV; Inclusion 3—023XY015NV; Inclusion 4—none

134—Devada-Dosie-Softscrabble association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Devada very stony loam, 2 to 15 percent slopes—50 percent
• Dosie very stony loam, 15 to 50 percent slopes—20 percent
• Softscrabble very stony loam, 8 to 30 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Lithic Xerollic Haplargids very gravelly loam, 2 to 4 percent slopes—5 percent
• Inclusion 2: Lithic Argixerolls very stony loam, 2 to 15 percent slopes—4 percent
• Inclusion 3: Tunnison very cobbly clay, 2 to 8 percent slopes—3 percent
• Inclusion 4: Rock outcrop—3 percent

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 2 to 15 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 15 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Dosie Soil

Classification: Pachic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: East-, west-, and south-facing side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 5 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 41 inches
Texture: Very gravelly clay loam, very gravelly clay
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 41 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 4.0 to 5.4 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—3; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing, concave side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 8 to 30 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Hooker balsamroot

Inclusion 2
Classification: Lithic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: Summits of plateaus

Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Utah juniper

Inclusion 3

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 4

Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Devada, Dosie, and Softscrabble soils—VIIs, nonirrigated
Range site: Devada soil—023XY031NV; Dosie soil—023XY016NV; Softscrabble soil—023XY041NV; Inclusion 1—023XY021NV; Inclusion 2—023XY035NV; Inclusion 3—023XY044NV; Inclusion 4—none

135—Devada-Hart Camp association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Devada very stony loam, 0 to 8 percent slopes—55 percent
• Hart Camp stony loam, 4 to 15 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Lithic Argixerolls very stony loam, 0 to 8 percent slopes—6 percent
• Inclusion 2: Lithic Xerollic Haplargids very flaggy loam, 0 to 4 percent slopes—4 percent
• Inclusion 3: Pachic Argixerolls stony loam, 4 to 15 percent slopes—3 percent
• Inclusion 4: Lithic Xerollic Camborthids extremely stony loam, 0 to 4 percent slopes—2 percent

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 0 to 8 percent
Elevation: 5,500 to 5,900 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 15 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Hart Camp Soil

Classification: Aridic Argixerolls, loamy, mixed, frigid, shallow
Position on landscape: Shoulders of plateaus
Parent material: Residuum derived from tuff
Slope range: 4 to 15 percent
Elevation: 5,500 to 5,900 feet
Dominant present vegetation: Mountain big sagebrush, antelope bitterbrush, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 70 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 10 percent; pebbles, 5 percent

Depth: 0 to 3 inches
Texture: Stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 13 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.7 to 3.4 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Convex summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Utah juniper

Inclusion 2
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Hooker balsamroot

Inclusion 3
Classification: Pachic Argixerolls, fine-loamy, mixed, frigid
Position on landscape: North-facing pockets on side slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Inclusion 4
Classification: Lithic Xerollic Camborthids, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Utah juniper

Interpretive Groups

Capability classification: Devada and Hart Camp soils—VIIs, nonirrigated
Range site: Devada soil—023XY031NV; Hart Camp soil—023XY015NV; Inclusion 1—023XY035NV; Inclusion 2—023XY021NV; Inclusion 3—023XY007NV; Inclusion 4—023XY035NV

136—Devada-Tunnison association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Devada very stony loam, 2 to 8 percent slopes—45 percent
• Tunnison very cobbly clay, 2 to 8 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Devada very stony loam, 8 to 30 percent slopes—5 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Lithic Xerollic Haplargids very cobbly loam, 2 to 8 percent slopes—3 percent
• Inclusion 4: Tunnison cobbly clay, 0 to 8 percent slopes—3 percent

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 2 to 8 percent
Elevation: 5,400 to 6,000 feet

Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 15 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Tunnison Soil

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 2 to 8 percent
Elevation: 5,400 to 6,000 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 3 percent; cobbles, 40 percent; pebbles, 15 percent

Depth: 0 to 1 inch
Texture: Very cobbly clay
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 31 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 31 to 38 inches
Texture: Weathered bedrock

Depth: 38 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.3 to 5.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Shoulders of plateaus

Distinctive present vegetation: Low sagebrush, Sandberg bluegrass

Inclusion 2

Position on landscape: Summits and rims of plateaus
Distinctive present vegetation: None

Inclusion 3

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: The lower, convex summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Hooker balsamroot

Inclusion 4

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Distinctive present vegetation: Rubber rabbitbrush, bottlebrush squirreltail, Hooker balsamroot

Interpretive Groups

Capability classification: Devada and Tunnison soils—VIIs, nonirrigated
Range site: Devada soil—023XY031NV; Tunnison soil—023XY044NV; Inclusion 1—023XY031NV; Inclusion 2—none; Inclusion 3—023XY021NV; Inclusion 4—023XY001NV

137—Devada-Tunnison-Rock outcrop association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Devada extremely stony loam, 4 to 15 percent slopes—40 percent
• Tunnison extremely stony clay, 4 to 15 percent slopes—35 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Lithic Xerollic Haplargids very cobbly loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Devada extremely stony loam, 15 to 30 percent slopes—3 percent
• Inclusion 3: Tunnison cobbly clay, 4 to 15 percent slopes—2 percent

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex summits of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 15 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 25 percent; pebbles, 20 percent

Depth: 0 to 4 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Tunnison Soil

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic

Position on landscape: Slightly concave summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 4 to 15 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 40 percent; cobbles, 30 percent; pebbles, 15 percent

Depth: 0 to 1 inch
Texture: Extremely stony clay
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 31 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 31 to 38 inches
Texture: Weathered bedrock

Depth: 38 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.3 to 5.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Summits of plateaus
Kind of rock: Basalt

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: The lower areas on summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Hooker balsamroot
Inclusion 2
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Shoulders of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 3
Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Distinctive present vegetation: Rubber rabbitbrush, bottlebrush squirreltail, Hooker balsamroot

Interpretive Groups

Capability classification: Devada and Tunnison soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Devada soil—023XY031NV; Tunnison soil—023XY044NV; Rock outcrop—none; Inclusion 1—023XY021NV; Inclusion 2—023XY031NV; Inclusion 3—023XY001NV

138—Devada-Reywat-Tunnison association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Devada very stony loam, 4 to 30 percent slopes—35 percent
• Reywat very stony loam, 30 to 50 percent slopes—30 percent
• Tunnison very cobbly clay, 4 to 15 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—5 percent
• Inclusion 2: Lithic Xerollic Haplargids very cobbly sandy loam, 2 to 8 percent slopes—4 percent
• Inclusion 3: Bucklake very stony loam, 15 to 50 percent slopes—4 percent

• Inclusion 4: Aridic Haploxerolls clay loam, 2 to 8 percent slopes—2 percent

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex or smooth summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 5,100 to 5,400 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 15 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 5,100 to 5,400 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None

Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Tunnison Soil

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 4 to 15 percent
Elevation: 5,100 to 5,400 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 3 percent; cobbles, 40 percent; pebbles, 15 percent

Depth: 0 to 1 inch
Texture: Very cobbly clay
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 31 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 31 to 38 inches
Texture: Weathered bedrock

Depth: 38 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.3 to 5.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None
Inclusion 2
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Convex summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Hooker balsamroot
Inclusion 3
Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South- and west-facing side slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 4
Classification: Aridic Haploxerolls, fine-loamy, mixed, mesic
Position on landscape: Intermittent stream terraces
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Interpretive Groups

Capability classification: Devada, Reywat, and Tunnison soils—VIIs, nonirrigated
Range site: Devada soil—023XY031NV; Reywat soil—023XY039NV; Tunnison soil—023XY044NV; Inclusion 1—none; Inclusion 2—023XY021NV; Inclusion 3—023XY039NV; Inclusion 4—023XY009NV

150—Skedaddle-Old Camp-Rock outcrop association

Map Unit Setting

Position on landscape: Plateaus, hills, and mountains

Composition

Major components:
• Skedaddle very stony loam, 30 to 50 percent slopes—45 percent
• Old Camp extremely stony loam, 30 to 50 percent slopes—25 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Pickup very stony loam, 30 to 50 percent slopes—5 percent
• Inclusion 2: Jaybee very cobbly sandy loam, 4 to 30 percent slopes—5 percent
• Inclusion 3: Xerollic Haplargids very stony sandy loam, 8 to 30 percent slopes—4 percent
• Inclusion 4: Fluventic Haploxerolls stony loam, 2 to 15 percent slopes—1 percent

Characteristics of the Skedaddle Soil

Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: Convex back slopes of plateaus, hills, and mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 20 percent; pebbles, 25 percent

Depth: 0 to 5 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 8 inches
Texture: Weathered bedrock

Depth: 8 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 12 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.3 to 1.0 inch
Water-supplying capacity: 6 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—1; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Old Camp Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Slightly concave back slopes of plateaus, hills, and mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 20 percent; cobbles, 15 percent; pebbles, 35 percent

Depth: 0 to 2 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 14 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Summits and side slopes of plateaus, hills, and mountains
Kind of rock: Basalt

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing side slopes of hills and mountains
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot
Inclusion 2
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of small plateau remnants
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 3
Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Toe slopes of hills
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 4
Classification: Fluventic Haploxerolls, loamy-skeletal, mixed, mesic
Position on landscape: Inset fan remnants
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Interpretive Groups

Capability classification: Skedaddle and Old Camp soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Skedaddle soil—023XY030NV; Old Camp soil—026XY022NV; Rock outcrop—none; Inclusion 1—023XY037NV; Inclusion 2—023XY047NV; Inclusion 3—023XY006NV; Inclusion 4—023XY006NV

151—Skedaddle-Jaybee-Rock outcrop association

Map Unit Setting

Position on landscape: Hills, mountains, and plateaus

Composition

Major components:
• Skedaddle very stony loam, 15 to 50 percent slopes—45 percent
• Jaybee very cobbly sandy loam, 4 to 30 percent slopes—30 percent
• Rock outcrop—10 percent
Contrasting inclusions:
• Inclusion 1: Pickup very stony loam, 30 to 50 percent slopes—7 percent
• Inclusion 2: Old Camp very stony loam, 30 to 50 percent slopes—4 percent
• Inclusion 3: Manogue very cobbly clay, 2 to 8 percent slopes—4 percent

Characteristics of the Skedaddle Soil

Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: Shoulders and back slopes of plateaus, hills, and mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,200 to 5,600 feet
Dominant present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 20 percent; pebbles, 25 percent

Depth: 0 to 5 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 8 inches
Texture: Weathered bedrock

Depth: 8 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 12 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.3 to 1.0 inch
Water-supplying capacity: 6 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—1; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateau remnants
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,200 to 5,600 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Summits and side slopes of plateaus, hills, and mountains
Kind of rock: Basalt

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing side slopes and back slopes of plateaus and mountains
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Inclusion 2
Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-facing back slopes of plateaus and mountains
Distinctive present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Inclusion 3
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability classification: Skedaddle and Jaybee soils—VIIs; Rock outcrop—VIIIs

Range site: Skedaddle soil—023XY030NV; Jaybee soil—023XY047NV; Rock outcrop—none; Inclusion 1—023XY037NV; Inclusion 2—026XY022NV; Inclusion 3—023XY047NV

160—Dun Glen-Davey-Hawsley association

Map Unit Setting

Position on landscape: Lake plain terraces, alluvial fans, and sand sheets

Composition

Major components:
- Dun Glen very fine sandy loam, 2 to 4 percent slopes—45 percent
- Davey loamy fine sand, 2 to 4 percent slopes—25 percent
- Hawsley loamy sand, 4 to 15 percent slopes—15 percent

Contrasting inclusions:
- Inclusion 1: Typic Camborthids fine sandy loam, 0 to 4 percent slopes—5 percent
- Inclusion 2: Zorravista fine sand, 2 to 8 percent slopes—4 percent
- Inclusion 3: Badland, 4 to 30 percent slopes—4 percent
- Inclusion 4: Smaug very fine sandy loam, 2 to 8 percent slopes—2 percent

Characteristics of the Dun Glen Soil

Classification: Typic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: The lower lake plain terraces
Parent material: Loess and volcanic ash over mixed alluvium
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 4 inches
Texture: Very fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 4 to 11 inches
Texture: Very fine sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 11 to 60 inches
Texture: Fine sandy loam, very fine sandy loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Strongly alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 6.8 to 8.0 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Davey Soil

Classification: Xerollic Camborthids, sandy, mixed, mesic
Position on landscape: Alluvial fans
Parent material: Mixed alluvium
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, Indian ricegrass

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 10 percent

Depth: 0 to 4 inches
Texture: Loamy fine sand
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 17 inches
Texture: Fine sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 to 42 inches
Texture: Loamy fine sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 42 to 60 inches
Texture: Silt loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 6.4 to 8.0 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Hawsley Soil

Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on alluvial fans and lake plain terraces
Parent material: Mixed alluvium and water-reworked eolian deposits
Slope range: 4 to 15 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 8 to 42 inches
Texture: Stratified fine sand and sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline or strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 42 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.6 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Camborthids, fine-loamy, mixed, mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush

Inclusion 2
Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces

Distinctive present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Inclusion 3

Position on landscape: Eroded lake plain terraces
Distinctive present vegetation: None

Inclusion 4

Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Dun Glen soil—IIe, Davey soil—IIIs, Hawsley soil—IVs, irrigated; Dun Glen soil—VIIc, Davey and Hawsley soils—VIIs, nonirrigated
Range site: Dun Glen soil—024XY002NV; Davey soil—023XY051NV; Hawsley soil—027XY009NV; Inclusion 1—024XY003NV; Inclusion 2—023XY011NV; Inclusion 3—none; Inclusion 4—024XY004NV

170—Zorravista-Davey association

Map Unit Setting

Position on landscape: Sand dunes, sand sheets, and alluvial fans

Composition

Major components:
• Zorravista fine sand, 2 to 8 percent slopes—50 percent
• Davey loamy fine sand, 2 to 8 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Dun Glen sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Xeric Torriorthents gravelly loamy fine sand, 2 to 4 percent slopes—5 percent
• Inclusion 3: Xerollic Camborthids gravelly loamy sand, 4 to 30 percent slopes—5 percent

Characteristics of the Zorravista Soil

Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Sand dunes and sand sheets superimposed on beach terraces and alluvial fans
Parent material: Sandy eolian material derived from mixed rock sources
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 3 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.0 to 4.2 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.17; T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Davey Soil

Classification: Xerollic Camborthids, sandy, mixed, mesic
Position on landscape: Alluvial fans adjacent to sand sheets
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, Indian ricegrass

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 10 percent

Depth: 0 to 4 inches
Texture: Loamy fine sand
Structure: Single grained
Consistence: Loose
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 17 inches
Texture: Fine sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 to 42 inches
Texture: Loamy fine sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 42 to 60 inches
Texture: Silt loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.4 to 8.0 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: The lower beach terraces adjacent to sand sheets
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Xeric Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Alluvial fans adjacent to sand sheets
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, Indian ricegrass

Inclusion 3
Classification: Xerollic Camborthids, sandy or sandy-skeletal over fine-loamy, mixed, mesic
Position on landscape: Fan aprons adjacent to sand sheets
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Davey soil—IIIs, irrigated; Zorravista and Davey soils—VIIs, nonirrigated
Range site: Zorravista soil—023XY011NV; Davey soil—023XY051NV; Inclusion 1—024XY002NV; Inclusion 2—023XY051NV; Inclusion 3—023XY038NV

171—Zorravista sand, 4 to 15 percent slopes

Map Unit Setting

Position on landscape: Sand sheets superimposed on beach terraces

Composition

Major component:
• Zorravista sand, 4 to 15 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Veta gravelly sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Smaug very fine sandy loam, 2 to 8 percent slopes—3 percent
• Inclusion 3: Lithic Xeric Torripsamments loamy sand, 2 to 4 percent slopes—2 percent

Characteristics of the Zorravista Soil

Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on beach terraces
Parent material: Sandy eolian material derived from mixed rock sources
Slope range: 4 to 15 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 4 inches
Texture: Sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.0 to 4.2 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.17; T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Alluvial fans adjacent to beach terraces
Distinctive present vegetation: Wyoming big sagebrush, Douglas rabbitbrush, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces adjacent to sand sheets
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Classification: Lithic Xeric Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on beach terraces adjacent to tufa rock outcrops
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, needleandthread

Interpretive Groups

Capability classification: Zorravista soil—VIIs, nonirrigated
Range site: Zorravista soil—023XY011NV; Inclusion 1—026XY016NV; Inclusion 2—024XY004NV; Inclusion 3—026XY020NV

172—Zorravista-Swingler association

Map Unit Setting

Position on landscape: Sand dunes and interdune lake plain terraces

Composition

Major components:
• Zorravista fine sand, 2 to 15 percent slopes—50 percent
• Swingler sandy loam, 0 to 2 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Aquic Torriorthents silt loam, 0 to 2 percent slopes—5 percent
• Inclusion 2: Aquic Torriorthents loam, 0 to 4 percent slopes—4 percent
• Inclusion 3: Typic Torriorthents loamy sand, 0 to 8 percent slopes—4 percent
• Inclusion 4: Typic Torriorthents sandy loam, 0 to 4 percent slopes—2 percent

Characteristics of the Zorravista Soil

Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Sand dunes
Parent material: Sandy eolian material derived from mixed rock sources
Slope range: 2 to 15 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 4 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 60 inches
Texture: Fine sand

Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.0 to 4.2 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.17; T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Swingler Soil

Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: Interdune lake plain terraces
Parent material: Mixed alluvium over lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Black greasewood, bottlebrush squirreltail, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 6 inches
Texture: Sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 6 to 60 inches
Texture: Stratified very fine sandy loam and silt loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Very strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: 60 to 72 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 8.4 to 10.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Aquic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Black greasewood, basin big sagebrush, basin wildrye

Inclusion 2
Classification: Aquic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The middle lake plain terraces
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye

Inclusion 3
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The upper lake plain terraces
Distinctive present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Inclusion 4
Classification: Typic Torriorthents, fine-loamy, mixed (calcareous), mesic
Position on landscape: Interdune lake plain terraces
Distinctive present vegetation: Black greasewood, sagebrush, basin wildrye

Interpretive Groups

Capability classification: Swingler soil—IIc, irrigated; Zorravista soil—VIIs, Swingler soil—VIIc, nonirrigated
Range site: Zorravista soil—023XY011NV; Swingler soil—024XY008NV; Inclusion 1—026XY012NV; Inclusion 2—024XY015NV; Inclusion 3—023XY011NV; Inclusion 4—024XY022NV

181—Tunnison-Devada association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Tunnison cobbly clay, 0 to 8 percent slopes—60 percent
• Devada extremely stony loam, 0 to 8 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Tunnison very stony clay, 0 to 8 percent slopes—6 percent
• Inclusion 2: Rock outcrop—5 percent
• Inclusion 3: Lithic Xerollic Camborthids cobbly clay, 0 to 8 percent slopes—4 percent

Characteristics of the Tunnison Soil

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 0 to 8 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Rubber rabbitbrush, bottlebrush squirreltail, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 10 percent

Depth: 0 to 1 inch
Texture: Cobbly clay
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 31 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 31 to 38 inches
Texture: Weathered bedrock

Depth: 38 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 3.3 to 4.4 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—2; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 0 to 8 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 25 percent; pebbles, 20 percent

Depth: 0 to 4 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches

Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Concave summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None
Inclusion 3
Classification: Lithic Xerollic Camborthids, clayey, montmorillonitic, mesic
Position on landscape: Convex summits of plateaus
Distinctive present vegetation: Rubber rabbitbrush, bottlebrush squirreltail, Hooker balsamroot

Interpretive Groups

Capability classification: Tunnison and Devada soils—VIIs, nonirrigated
Range site: Tunnison soil—023XY001NV; Devada soil—023XY031NV; Inclusion 1—023XY044NV; Inclusion 2—none; Inclusion 3—023XY001NV

182—Tunnison-Rubble land association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Tunnison cobbly clay, 4 to 8 percent slopes—30 percent
• Rubble land—30 percent
• Tunnison very cobbly clay, 8 to 15 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Softscrabble stony loam, 15 to 50 percent slopes—6 percent
• Inclusion 2: Bucklake extremely stony loam, 15 to 50 percent slopes—6 percent
• Inclusion 3: Lithic Xerollic Haplargids extremely cobbly clay loam, 8 to 30 percent slopes—2 percent
• Inclusion 4: Dosie very stony loam, 15 to 30 percent slopes—1 percent

Characteristics of the Cobbly Tunnison Soil

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Summits and concave side slopes of plateaus
Parent material: Residuum derived from basalt
Slope range: 4 to 8 percent
Elevation: 5,700 to 6,200 feet
Dominant present vegetation: Rubber rabbitbrush, bottlebrush squirreltail, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 10 percent

Depth: 0 to 1 inch
Texture: Cobbly clay
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 31 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 31 to 38 inches
Texture: Weathered bedrock

Depth: 38 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 3.3 to 4.4 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium

Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—2; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Rubble Land

Position on landscape: Side slopes of plateaus
Surface cover: Stones, boulders, and cobbles, 90 to 100 percent

Characteristics of the Very Cobbly Tunnison Soil

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 8 to 15 percent
Elevation: 5,700 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 3 percent; cobbles, 40 percent; pebbles, 15 percent

Depth: 0 to 1 inch
Texture: Very cobbly clay
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 31 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 31 to 38 inches
Texture: Weathered bedrock

Depth: 38 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.3 to 5.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing side slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass
Inclusion 2
Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South- and west-facing side slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 3
Classification: Lithic Xerollic Haplargids, clayey-skeletal, montmorillonitic, mesic
Position on landscape: Convex summits and shoulders of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Hooker balsamroot
Inclusion 4
Classification: Pachic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: East-, west-, and south-facing side slopes of plateaus
Distinctive present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Interpretive Groups

Capability classification: Tunnison soils—VIIs, nonirrigated; Rubble land—VIIIs
Range site: The cobbly Tunnison soil—023XY001NV; Rubble land—none; the very cobbly Tunnison soil—023XY044NV; Inclusion 1—023XY007NV; Inclusion

2—023XY039NV; Inclusion 3—023XY021NV; Inclusion 4—023XY016NV

183—Tunnison complex, 0 to 8 percent slopes

Map Unit Setting

Position on landscape: Interplateau basins and plateaus

Composition

Major components:
• Tunnison very cobbly clay, 0 to 8 percent slopes—50 percent
• Tunnison cobbly clay, 0 to 4 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Lithic Xerollic Haplargids extremely cobbly clay loam, 2 to 8 percent slopes—4 percent
• Inclusion 2: Typic Chromoxererts cobbly clay, 0 to 4 percent slopes—3 percent
• Inclusion 3: Devada extremely cobbly loam, 4 to 8 percent slopes—3 percent

Characteristics of the Very Cobbly Tunnison Soil

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Interplateau basins
Parent material: Residuum derived from basalt
Slope range: 0 to 8 percent
Elevation: 5,700 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 3 percent; cobbles, 40 percent; pebbles, 15 percent

Depth: 0 to 1 inch
Texture: Very cobbly clay
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 31 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 31 to 38 inches
Texture: Weathered bedrock

Depth: 38 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.3 to 5.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Cobbly Tunnison Soil

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Interplateau basins
Parent material: Residuum derived from basalt
Slope range: 0 to 4 percent
Elevation: 5,700 to 6,200 feet
Dominant present vegetation: Rubber rabbitbrush, bottlebrush squirreltail, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 10 percent

Depth: 0 to 1 inch
Texture: Cobbly clay
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 31 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, firm

Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 31 to 38 inches
Texture: Weathered bedrock

Depth: 38 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 3.3 to 4.4 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Slow
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—2; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Hooker balsamroot
Inclusion 2
Classification: Typic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Interplateau basins
Distinctive present vegetation: Rubber rabbitbrush, bottlebrush squirreltail, Hooker balsamroot
Inclusion 3
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex summits and shoulders of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass

Interpretive Groups

Capability classification: Tunnison soils—VIIs, nonirrigated
Range site: The very cobbly Tunnison soil—023XY044NV; the cobbly Tunnison soil—023XY001NV; Inclusion 1—023XY021NV; Inclusion 2—023XY001NV; Inclusion 3—023XY031NV

190—Swingler complex, 2 to 4 percent slopes

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Swingler fine sandy loam, 2 to 4 percent slopes—50 percent
• Swingler loamy sand, 2 to 4 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents very fine sandy loam, 4 to 15 percent slopes—8 percent
• Inclusion 2: Veta gravelly fine sandy loam, 2 to 4 percent slopes—2 percent

Characteristics of Swingler Fine Sandy Loam

Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Mixed alluvium over lacustrine sediments
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 6 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 6 to 60 inches
Texture: Stratified very fine sandy loam and silt loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Very strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 8.4 to 10.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Characteristics of Swingler Loamy Sand

Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: Thin sand sheets superimposed on lake plain terraces
Parent material: Mixed alluvium over lacustrine sediments
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Black greasewood, Nevada dalea, Indian ricegrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 4 inches
Texture: Loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 4 to 60 inches
Texture: Stratified very fine sandy loam and silt loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Very strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 8.4 to 10.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.17; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: Side slopes of lake plain terraces
Distinctive present vegetation: Black greasewood, seepweed, shadscale
Inclusion 2
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Fan aprons adjacent to lake plain terraces
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Swingler fine sandy loam—IIe, irrigated; VIIc, nonirrigated; Swingler loamy sand—VIIs, nonirrigated
Range site: Swingler fine sandy loam—024XY003NV; Swingler loamy sand—027XY012NV; Inclusion 1—027XY025NV; Inclusion 2—023XY038NV

193—Swingler-Ragtown association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Swingler silt loam, 0 to 2 percent slopes—55 percent
• Ragtown clay loam, 0 to 2 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Trocken gravelly sandy loam, 0 to 4 percent slopes—6 percent
• Inclusion 2: Playas—6 percent
• Inclusion 3: Mazuma loamy sand, 0 to 4 percent slopes—2 percent
• Inclusion 4: Typic Torriorthents loamy sand, 2 to 8 percent slopes—1 percent

Characteristics of the Swingler Soil

Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Mixed alluvium over lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 6 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 6 to 19 inches
Texture: Loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 23 to 68

Depth: 19 to 60 inches
Texture: Silt loam, very fine sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 60 to 70 inches
Texture: Stratified silty clay loam and silty clay
Structure: Massive
Consistence: Hard, friable
Reaction: Very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 8.4 to 10.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The slightly lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None

Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Alluvial fans adjacent to the highest lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Position on landscape: The lowest part of lake plain terraces
Distinctive present vegetation: None
Inclusion 3
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The higher lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 4
Classification: Typic Torriorthents, sandy, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Interpretive Groups

Capability classification: Swingler soil—IIIs, irrigated; Swingler and Ragtown soils—VIIs, nonirrigated
Range site: Swingler soil—024XY003NV; Ragtown soil—027XY025NV; Inclusion 1—024XY002NV; Inclusion 2—none; Inclusion 3—024XY002NV; Inclusion 4—027XY009NV

200—Churchill-Swingler association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Churchill very gravelly sandy loam, 0 to 2 percent slopes—50 percent
• Swingler fine sandy loam, 2 to 4 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Swingler loamy sand, 0 to 2 percent slopes—7 percent
• Inclusion 2: Playas—3 percent

Characteristics of the Churchill Soil

Classification: Typic Natrargids, fine, montmorillonitic, mesic
Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 40 percent

Depth: 0 to 2 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Hard, friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 45

Depth: 2 to 21 inches
Texture: Gravelly silty clay
Structure: Prismatic
Consistence: Hard, friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 30 to 90

Depth: 21 to 60 inches
Texture: Silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 60

Soil and Water Features

Depth to a seasonal high water table: 54 to 72 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 8.9 to 10.0 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow

Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Swingler Soil

Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: The slightly higher lake plain terraces
Parent material: Mixed alluvium over lacustrine sediments
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 6 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 6 to 60 inches
Texture: Stratified very fine sandy loam and silt loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Very strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR less than 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 8.4 to 10.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: Thin sand sheets superimposed on lake plain terraces
Distinctive present vegetation: Black greasewood, Nevada dalea, Indian ricegrass
Inclusion 2
Position on landscape: The lowest part of lake plain terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Swingler soil—IIe, irrigated; Churchill soil—VIIs, Swingler soil—VIIc, nonirrigated
Range site: Churchill soil—027XY025NV; Swingler soil—024XY003NV; Inclusion 1—027XY012NV; Inclusion 2—none

210—Veta-Langston association

Map Unit Setting

Position on landscape: Alluvial fans, lake plain terraces, and alluvial fan remnants

Composition

Major components:
• Veta gravelly sandy loam, 2 to 4 percent slopes—65 percent
• Langston gravelly loam, 4 to 15 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents very fine sandy loam, 0 to 2 percent slopes—4 percent
• Inclusion 2: Veta very stony fine sandy loam, 2 to 15 percent slopes—4 percent
• Inclusion 3: Smaug very fine sandy loam, 2 to 8 percent slopes—4 percent
• Inclusion 4: Trocken gravelly sandy loam, 2 to 8 percent slopes—3 percent

Characteristics of the Veta Soil

Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: The lower alluvial fans and lake plain terraces
Parent material: Mixed alluvium
Slope range: 2 to 4 percent
Elevation: 4,000 to 4,900 feet

Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 30 percent

Depth: 0 to 6 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 18 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 to 60 inches
Texture: Stratified extremely gravelly loamy sand to very gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 3.0 to 4.0 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Langston Soil

Classification: Xerollic Haplargids, fine-loamy over sandy or sandy-skeletal, mixed, mesic
Position on landscape: Alluvial fan remnants and the upper lake plain terraces
Parent material: Mixed alluvium over lacustrine sediments
Slope range: 4 to 15 percent
Elevation: 4,000 to 4,900 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 2 percent; pebbles, 60 percent

Depth: 0 to 4 inches
Texture: Gravelly loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 20 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 60 inches
Texture: Stratified very gravelly sand and extremely gravelly sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 2.8 to 4.2 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate

Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: The higher alluvial fans
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 3
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail
Inclusion 4
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower alluvial fans and lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Veta soil—IVs, irrigated; Veta soil—VIIs, Langston soil—VIs, nonirrigated
Range site: Veta soil—023XY038NV; Langston soil—023XY038NV; Inclusion 1—024XY002NV; Inclusion 2—023XY038NV; Inclusion 3—024XY004NV; Inclusion 4—024XY002NV

212—Veta-Trocken association

Map Unit Setting

Position on landscape: Alluvial fans

Composition

Major components:
• Veta gravelly sandy loam, 2 to 4 percent slopes—60 percent
• Trocken gravelly sandy loam, 2 to 4 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents loamy sand, 0 to 4 percent slopes—8 percent
• Inclusion 2: Typic Torriorthents very fine sandy loam, 0 to 4 percent slopes—2 percent

Characteristics of the Veta Soil

Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: The upper alluvial fans
Parent material: Mixed alluvium
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 30 percent

Depth: 0 to 6 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 18 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 to 60 inches
Texture: Stratified extremely gravelly loamy sand to very gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 3.0 to 4.0 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight

Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower alluvial fans
Parent material: Mixed alluvium
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 3.0 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, sandy, mixed, mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Veta soil—IVs, irrigated; Veta and Trocken soils—VIIs, nonirrigated
Range site: Veta soil—023XY038NV; Trocken soil—024XY002NV; Inclusion 1—024XY002NV; Inclusion 2—024XY002NV

220—Cewat very stony fine sandy loam, 4 to 15 percent slopes

Map Unit Setting

Position on landscape: Alluvial fans and beach terraces cut into toe slopes of plateaus

Composition

Major component:
• Cewat very stony fine sandy loam, 4 to 15 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Typic Haplargids stony loam, 4 to 15 percent slopes—7 percent
• Inclusion 2: Fluventic Haploxerolls stony loam, 2 to 8 percent slopes—2 percent
• Inclusion 3: Skedaddle very stony loam, 15 to 30 percent slopes—1 percent

Characteristics of the Cewat Soil

Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Alluvial fans and beach terraces cut into toe slopes of plateaus
Parent material: Water-reworked residuum and colluvium derived from volcanic rock
Slope range: 4 to 15 percent
Elevation: 3,800 to 4,400 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches

Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 45 percent; pebbles, 40 percent

Depth: 0 to 2 inches
Texture: Very stony fine sandy loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 30 inches
Texture: Very gravelly loam, extremely gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral or moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 30 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 1.8 to 3.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.17; T value—2; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Haplargids, loamy, mixed, mesic, shallow
Position on landscape: Slightly concave lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Fluventic Haploxerolls, loamy-skeletal, mixed, mesic
Position on landscape: Stream terraces adjacent to alluvial fans
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye
Inclusion 3
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: Hills adjacent to the higher alluvial fans and the toe slopes of plateaus
Distinctive present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Interpretive Groups

Capability classification: Cewat soil—IVs, irrigated; VIIs, nonirrigated
Range site: Cewat soil—023XY038NV; Inclusion 1—024XY002NV; Inclusion 2—023XY005NV; Inclusion 3—023XY030NV

241—Benin complex

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Benin silty clay loam, 0 to 2 percent slopes, rarely flooded—50 percent
• Benin silty clay loam, 0 to 2 percent slopes, occasionally flooded—35 percent
Contrasting inclusions:
• Inclusion 1: Slaw silty clay loam, 0 to 2 percent slopes—5 percent
• Inclusion 2: Aquic Torriorthents silty clay loam, 0 to 2 percent slopes—5 percent
• Inclusion 3: Benin loamy sand, 0 to 2 percent slopes—3 percent
• Inclusion 4: Zorravista fine sand, 2 to 15 percent slopes—2 percent

Characteristics of the Rarely Flooded Benin Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Black greasewood, inland saltgrass, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 8 to 60 inches
Texture: Silty clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, very firm
Reaction: Moderately alkaline or strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR more than 23

Soil and Water Features

Frequency of flooding: Rare
Permeability: Very slow
Available water capacity: 9.0 to 9.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Occasionally Flooded Benin Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Torrey quailbush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 1 inch
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 1 to 60 inches
Texture: Silty clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, very firm
Reaction: Moderately alkaline or strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 23 to 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Flooding: Frequency—occasional; duration—very brief; months—November through June
Permeability: Very slow
Available water capacity: 9.0 to 9.8 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torrifluvents, fine-silty, mixed (calcareous), mesic
Position on landscape: The lower stream terraces
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye

Inclusion 2
Classification: Aquic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Lake plain terraces adjacent to seeps
Distinctive present vegetation: Silver buffaloberry, black greasewood, Torrey quailbush, inland saltgrass

Inclusion 3
Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Lake plain terraces adjacent to dunes
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye

Inclusion 4
Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Interpretive Groups

Capability classification: The rarely flooded Benin soil—

IVs, irrigated, VIIs, nonirrigated; the occasionally flooded Benin soil—VIIw, nonirrigated
Range site: The rarely flooded Benin soil—024XY011NV; the occasionally flooded Benin soil—024XY015NV; Inclusion 1—024XY015NV; Inclusion 2—024XY063NV; Inclusion 3—024XY015NV; Inclusion 4—023XY011NV

250—Old Camp-Reywat-Jaybee association

Map Unit Setting

Position on landscape: Hills and mountains

Composition

Major components:
• Old Camp very stony loam, 30 to 50 percent slopes—50 percent
• Reywat very stony loam, 30 to 50 percent slopes—25 percent
• Jaybee very cobbly sandy loam, 4 to 15 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—6 percent
• Inclusion 2: Fluventic Haploxerolls stony loam, 2 to 8 percent slopes—2 percent
• Inclusion 3: Bombadil very stony fine sandy loam, 4 to 15 percent slopes—2 percent

Characteristics of the Old Camp Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-, east-, and west-facing back slopes of hills and mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 15 percent; pebbles, 35 percent

Depth: 0 to 1 inch
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 15 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of hills and mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; pebbles, 25 percent

Depth: 0 to 10 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, friable

Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 14 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 to 19 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 19 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Crests and shoulders of hills and mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 15 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Position on landscape: Ridges and side slopes of hills and mountains
Distinctive present vegetation: None

Inclusion 2
Classification: Fluventic Haploxerolls, loamy-skeletal, mixed, mesic
Position on landscape: Stream terraces adjacent to hills
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Inclusion 3
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: The lower crests and shoulders of hills and mountains

Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Interpretive Groups

Capability classification: Old Camp, Reywat, and Jaybee soils—VIIs, nonirrigated
Range site: Old Camp soil—026XY022NV; Reywat soil—023XY039NV; Jaybee soil—023XY047NV; Inclusion 1—none; Inclusion 2—023XY005NV; Inclusion 3—023XY006NV

251—Old Camp-Jaybee-Pickup association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Old Camp extremely stony loam, 30 to 50 percent slopes—35 percent
• Jaybee very cobbly sandy loam, 4 to 15 percent slopes—30 percent
• Pickup very stony loam, 30 to 50 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—6 percent
• Inclusion 2: Reywat very stony loam, 30 to 50 percent slopes—3 percent
• Inclusion 3: Skedaddle very stony loam, 30 to 50 percent slopes—1 percent

Characteristics of the Old Camp Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 20 percent; cobbles, 15 percent; pebbles, 35 percent

Depth: 0 to 2 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 14 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 15 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky

Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Pickup Soil

Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 8 inches
Texture: Very stony loam

Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 34 inches
Texture: Very gravelly clay
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.2 to 4.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None

Inclusion 2
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing, concave back slopes of plateaus at the higher elevations
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 3
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: The lower back slopes of plateaus north of Smoke Creek
Distinctive present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Interpretive Groups

Capability classification: Old Camp, Jaybee, and Pickup soils—VIIs, nonirrigated
Range site: Old Camp soil—026XY022NV; Jaybee soil—023XY047NV; Pickup soil—023XY037NV; Inclusion 1—none; Inclusion 2—023XY039NV; Inclusion 3—023XY030NV

258—Old Camp-Reywat-Theon association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Old Camp very gravelly fine sandy loam, 15 to 50 percent slopes—50 percent
• Reywat very stony loam, 30 to 50 percent slopes—25 percent
• Theon very gravelly loam, 30 to 50 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—5 percent
• Inclusion 2: Singatse very stony fine sandy loam, 15 to 50 percent slopes—5 percent

Characteristics of the Old Camp Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-, west-, and east-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 2 inches
Texture: Very gravelly fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 14 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—5
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Theon Soil

Classification: Lithic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: The lower, south-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 2 inches
Texture: Very gravelly loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 2 to 11 inches
Texture: Very gravelly loam, very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 11 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 8 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 5 to 7 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Summits and side slopes of mountains
Distinctive present vegetation: None
Inclusion 2
Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower, convex side slopes of mountains
Distinctive present vegetation: Shadscale, desert needlegrass

Interpretive Groups

Capability classification: Old Camp, Reywat, and Theon soils—VIIs, nonirrigated
Range site: Old Camp soil—026XY022NV; Reywat soil—023XY039NV; Theon soil—027XY017NV; Inclusion 1—none; Inclusion 2—027XY027NV

261—Pickup-Bucklake association

Map Unit Setting

Position on landscape: Side slopes of plateaus

Composition

Major components:
• Pickup very stony loam, 30 to 50 percent slopes—50 percent
• Bucklake very stony loam, 30 to 50 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—6 percent
• Inclusion 2: Softscrabble very stony loam, 30 to 50 percent slopes—4 percent
• Inclusion 3: Reywat very stony loam, 30 to 50 percent slopes—4 percent
• Inclusion 4: Aridic Haploxerolls stony loam, 2 to 15 percent slopes—1 percent

Characteristics of the Pickup Soil

Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,900 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 34 inches
Texture: Very gravelly clay
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.2 to 4.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South-facing side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,900 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Summits and rims of plateaus
Distinctive present vegetation: None
Inclusion 2
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: The upper, north-facing, concave side slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye
Inclusion 3
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing, convex back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 4
Classification: Aridic Haploxerolls, loamy-skeletal, mixed, mesic
Position on landscape: Stream terraces adjacent to toe slopes of plateaus
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Interpretive Groups

Capability classification: Pickup and Bucklake soils—VIIs, nonirrigated
Range site: Pickup soil—023XY037NV; Bucklake soil—023XY039NV; Inclusion 1—none; Inclusion 2—023XY041NV; Inclusion 3—023XY039NV; Inclusion 4—023XY009NV

262—Pickup-Bucklake-Terca association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Pickup extremely stony loam, 15 to 30 percent slopes—35 percent
• Bucklake extremely stony loam, 30 to 50 percent slopes—30 percent
• Terca very stony loam, 15 to 50 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Reywat very stony loam, 30 to 50 percent slopes—7 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Devada very cobbly loam, 8 to 15 percent slopes—2 percent
• Inclusion 4: Aridic Haploxerolls stony loam, 2 to 8 percent slopes—2 percent

Characteristics of the Pickup Soil

Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: Shoulders of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 30 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 20 percent; cobbles, 10 percent

Depth: 0 to 8 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Slightly hard, very friable

Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 34 inches
Texture: Very gravelly clay
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.2 to 4.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.17; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Terca Soil

Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: South-, east-, and west-facing, convex crests and shoulders of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 17 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.3 to 1.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing, concave back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 2
Position on landscape: Summits and side slopes of mountains
Distinctive present vegetation: None
Inclusion 3
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: The lower areas on summits of plateau remnants and crests of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 4
Classification: Aridic Haploxerolls, loamy-skeletal, mixed, mesic
Position on landscape: Stream terraces adjacent to toe slopes of mountains
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Interpretive Groups

Capability classification: Pickup, Bucklake, and Terca soils—VIIs, nonirrigated
Range site: Pickup soil—023XY037NV; Bucklake soil—023XY039NV; Terca soil—023XY039NV; Inclusion 1—023XY039NV; Inclusion 2—none; Inclusion 3—023XY031NV; Inclusion 4—023XY009NV

264—Pickup-Wylo association

Map Unit Setting

Position on landscape: Hills

Composition

Major components:
• Pickup very stony loam, 15 to 50 percent slopes—50 percent
• Wylo very stony loam, 8 to 30 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Ceejay very stony loam, 4 to 30 percent slopes—5 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Xeric Torriorthents very gravelly loamy sand, 2 to 8 percent slopes—3 percent
• Inclusion 4: Skedaddle very stony loam, 30 to 50 percent slopes—3 percent

Characteristics of the Pickup Soil

Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North- and east-facing back slopes of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches

Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 34 inches
Texture: Very gravelly clay
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.2 to 4.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Crests and shoulders of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 8 to 30 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: The lower, south-, east-, and west-facing crests and side slopes of hills
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Position on landscape: Crests and side slopes of hills
Distinctive present vegetation: None

Inclusion 3
Classification: Xeric Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Channels and fanlettes adjacent to toe slopes of hills
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage
Inclusion 4
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: Convex back slopes of hills
Distinctive present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Interpretive Groups

Capability classification: Pickup and Wylo soils—VIIs
Range site: Pickup soil—023XY037NV; Wylo soil—023XY037NV; Inclusion 1—023XY047NV; Inclusion 2—none; Inclusion 3—027XY029NV; Inclusion 4—023XY030NV

271—Wylo-Pickup-Bucklake association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Wylo very stony loam, 8 to 30 percent slopes—40 percent
• Pickup very stony loam, 30 to 50 percent slopes—30 percent
• Bucklake extremely stony loam, 30 to 50 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Reywat very stony loam, 30 to 50 percent slopes—9 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Softscrabble very stony loam, 30 to 50 percent slopes—2 percent

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 8 to 30 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data
Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Pickup Soil

Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 34 inches
Texture: Very gravelly clay
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.2 to 4.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 9 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 9 to 13 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 2
Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None
Inclusion 3
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: The upper, north-facing, concave back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Interpretive Groups

Capability classification: Wylo, Pickup, and Bucklake soils—VIIs, nonirrigated
Range site: Wylo soil—023XY037NV; Pickup soil—023XY037NV; Bucklake soil—023XY039NV; Inclusion 1—023XY039NV; Inclusion 2—none; Inclusion 3—023XY041NV

272—Wylo-Manogue-Pickup association

Map Unit Setting

Position on landscape: Hills and plateaus

Composition

Major components:
• Wylo very stony loam, 4 to 30 percent slopes—35 percent
• Manogue cobbly clay, 4 to 30 percent slopes—30 percent
• Pickup very stony loam, 15 to 30 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Reywat very stony loam, 15 to 50 percent slopes—7 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Old Camp very stony loam, 15 to 50 percent slopes—4 percent

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Summits and shoulders of hills and plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Manogue Soil

Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Concave summits of plateaus

Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 1 percent; cobbles, 15 percent; pebbles, 10 percent

Depth: 0 to 4 inches
Texture: Cobbly clay
Structure: Granular
Consistence: Hard, very firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 20 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, very firm
Reaction: Mildly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 59 inches
Texture: Clay
Structure: Prismatic
Consistence: Hard, firm
Reaction: Moderately alkaline
Salinity: 2 to 8 mmhos per cm
Sodicity: SAR less than 2

Depth: 59 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 5.6 to 8.3 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.24; T value—3; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Pickup Soil

Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing back slopes of plateaus and hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 30 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 34 inches
Texture: Very gravelly clay
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.2 to 4.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7

Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing, concave back slopes of hills and plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 2
Position on landscape: Crests and side slopes of hills and mountains
Distinctive present vegetation: None
Inclusion 3
Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-facing back slopes of hills and plateaus
Distinctive present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Interpretive Groups

Capability classification: Wylo and Pickup soils—VIIs; Manogue soil—VIIe, nonirrigated
Range site: Wylo soil—023XY037NV; Manogue soil—023XY047NV; Pickup soil—023XY037NV; Inclusion 1—023XY039NV; Inclusion 2—none; Inclusion 3—026XY022NV

273—Wylo-Bucklake-Rock outcrop association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Wylo very stony loam, 8 to 30 percent slopes—45 percent
• Bucklake extremely stony loam, 30 to 50 percent slopes—30 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Pickup very stony loam, 30 to 50 percent slopes—6 percent
• Inclusion 2: Manogue very cobbly clay, 2 to 8 percent slopes—3 percent
• Inclusion 3: Aridic Haploxerolls stony loam, 2 to 15 percent slopes—1 percent

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 8 to 30 percent
Elevation: 4,600 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: Back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 4,600 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Rock Outcrop

Position on landscape: Summits of plateaus
Kind of rock: Basalt or andesite

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing back slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot
Inclusion 2
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Summits of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 3
Classification: Aridic Haploxerolls, loamy, mixed, mesic
Position on landscape: Stream terraces adjacent to toe slopes of plateaus
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Interpretive Groups

Capability classification: Wylo and Bucklake soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Wylo soil—023XY037NV; Bucklake soil—023XY039NV; Rock outcrop—none; Inclusion 1—023XY037NV; Inclusion 2—023XY047NV; Inclusion 3—023XY009NV

274—Wylo-Rock outcrop association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Wylo extremely stony loam, 8 to 30 percent slopes—75 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Pickup very stony loam, 30 to 50 percent slopes—5 percent

• Inclusion 2: Bucklake extremely stony loam, 15 to 50 percent slopes—3 percent
• Inclusion 3: Manogue very cobbly clay, 0 to 8 percent slopes—2 percent

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 8 to 30 percent
Elevation: 4,400 to 5,900 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 20 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Extremely stony loam
Structure: Platy parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Rock Outcrop

Position on landscape: Summits and shoulders of plateaus
Kind of rock: Basalt or andesite

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing back slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot
Inclusion 2
Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South-facing back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 3
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability classification: Wylo soil—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Wylo soil—023XY037NV; Rock outcrop—none; Inclusion 1—023XY037NV; Inclusion 2—023XY039NV; Inclusion 3—023XY047NV

279—Wylo-Reywat-Rock outcrop association

Map Unit Setting

Position on landscape: Side slopes of plateaus and mountains

Composition

Major components:
• Wylo very stony loam, 30 to 50 percent slopes—40 percent

• Reywat very stony loam, 50 to 75 percent slopes—35 percent
• Rock outcrop—10 percent
Contrasting inclusions:
• Inclusion 1: Skedaddle very cobbly loam, 30 to 75 percent slopes—5 percent
• Inclusion 2: Typic Torriorthents very cobbly sandy loam, 30 to 75 percent slopes—5 percent
• Inclusion 3: Devada very stony loam, 15 to 50 percent slopes—3 percent
• Inclusion 4: Xerollic Haplargids very stony loam, 2 to 15 percent slopes—2 percent

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: South-facing back slopes of plateaus and mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of plateaus and mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 50 to 75 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Summits and shoulders of plateaus and mountains
Kind of rock: Basalt

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: South-facing back slopes of plateaus
Distinctive present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Inclusion 2
Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: The lower, west-facing back slopes of plateaus
Distinctive present vegetation: Shadscale, desert needlegrass

Inclusion 3
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: The higher back slopes of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass

Inclusion 4
Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Concave toe slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability classification: Wylo and Reywat soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Wylo soil—023XY037NV; Reywat soil—023XY039NV; Rock outcrop—none; Inclusion 1—023XY030NV; Inclusion 2—027XY027NV; Inclusion 3—023XY031NV; Inclusion 4—023XY047NV

280—Bombadil-Old Camp-Reywat association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Bombadil very stony fine sandy loam, 8 to 30 percent slopes—45 percent
• Old Camp very stony loam, 30 to 50 percent slopes—25 percent
• Reywat very stony loam, 30 to 50 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Jaybee very cobbly sandy loam, 4 to 15 percent slopes—5 percent
• Inclusion 2: Zorravista fine sand, 2 to 15 percent slopes—4 percent
• Inclusion 3: Softscrabble very stony loam, 30 to 50 percent slopes—3 percent
• Inclusion 4: Rock outcrop—3 percent

Characteristics of the Bombadil Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basic igneous rock
Slope range: 8 to 30 percent
Elevation: 4,400 to 5,900 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Very stony fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 6 inches
Texture: Loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 10 inches
Texture: Clay loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 20 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.1 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.24; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Old Camp Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-, east-, and west-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,900 feet
Dominant present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 15 percent; pebbles, 35 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 14 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,900 feet

Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Small plateau remnants
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Dunes, mostly adjacent to Dry Valley
Distinctive present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass
Inclusion 3
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing, concave back slopes of plateaus at the higher elevations
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye
Inclusion 4
Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Bombadil, Old Camp, and Reywat soils—VIIs, irrigated
Range site: Bombadil soil—023XY006NV; Old Camp soil—026XY022NV; Reywat soil—023XY039NV; Inclusion 1—023XY047NV; Inclusion 2—023XY011NV; Inclusion 3—023XY041NV; Inclusion 4—none

282—Bombadil-Hefed-Rubble land association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Bombadil very stony loam, 15 to 50 percent slopes—45 percent
• Hefed very stony sandy loam, 30 to 75 percent slopes—35 percent
• Rubble land—10 percent
Contrasting inclusions:
• Inclusion 1: Fireball very stony sandy loam, 15 to 50 percent slopes—4 percent
• Inclusion 2: Singatse very stony sandy loam, 15 to 50 percent slopes—2 percent

• Inclusion 3: Indiano very stony sandy loam, 15 to 50 percent slopes—2 percent
• Inclusion 4: Rock outcrop—2 percent

Characteristics of the Bombadil Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Crests and slightly convex back slopes of mountains
Parent material: Residuum and colluvium derived from basic igneous rock
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 6 inches
Texture: Loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 10 inches
Texture: Clay loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 20 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.1 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.32; T value—1; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Hefed Soil

Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Toe slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 75 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 30 percent

Depth: 0 to 2 inches
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 12 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 60 inches
Texture: Stratified very cobbly sandy loam and very gravelly sandy loam
Structure: Massive
Consistence: Hard, friable
Reaction: Mildly alkaline or moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 1.3 to 4.2 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Very rapid
Hydrologic group: B
Erosion factors (surface layer): K value—.10; T value—5; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Rubble Land

Position on landscape: Side slopes of mountains
Surface cover: Stones, boulders, and cobbles, 90 to 100 percent

Contrasting Inclusions

Inclusion 1
Classification: Typic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-facing toe slopes of mountains
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower, south- and east-facing side slopes of mountains
Distinctive present vegetation: Shadscale, desert needlegrass
Inclusion 3
Classification: Aridic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: North-facing, concave back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 4
Position on landscape: Summits and side slopes of mountains
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Bombadil and Hefed soils—VIIs, nonirrigated; Rubble land—VIIIs
Range site: Bombadil soil—023XY006NV; Hefed soil—026XY022NV; Rubble land—none; Inclusion 1—027XY030NV; Inclusion 2—027XY027NV; Inclusion 3—023XY039NV; Inclusion 4—none

283—Bombadil-Ceejay association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Bombadil stony loam, 4 to 30 percent slopes—45 percent
• Ceejay very stony loam, 4 to 15 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Manogue very cobbly clay, 0 to 4 percent slopes—5 percent
• Inclusion 2: Corral stony loam, 4 to 30 percent slopes—5 percent
• Inclusion 3: Reywat very stony loam, 15 to 50 percent slopes—3 percent
• Inclusion 4: Xerollic Haplargids very cobbly loam, 4 to 15 percent slopes—2 percent

Characteristics of the Bombadil Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basic igneous rock
Slope range: 4 to 30 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 1 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 6 inches
Texture: Loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 10 inches
Texture: Clay loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 20 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.1 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—1; wind erodibility group—6
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Ceejay Soil

Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 15 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 40 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 16 inches
Texture: Cobbly clay, cobbly clay loam
Structure: Prismatic parting to angular blocky
Consistence: Hard, friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus and interplateau basins
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 2
Classification: Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateaus
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 3
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing side slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 4
Classification: Xerollic Haplargids, fine, montmorillonitic, mesic

Position on landscape: Inset fan remnants
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass

Interpretive Groups

Capability classification: Bombadil and Ceejay soils—VIIs, nonirrigated
Range site: Bombadil soil—023XY006NV; Ceejay soil—023XY047NV; Inclusion 1—023XY047NV; Inclusion 2—023XY006NV; Inclusion 3—023XY039NV; Inclusion 4—023XY031NV

284—Bombadil-Corral association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Bombadil stony loam, 4 to 15 percent slopes—55 percent
• Corral stony loam, 4 to 15 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Bombadil stony loam, 15 to 50 percent slopes—5 percent
• Inclusion 2: Smaug very fine sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 3: Veta gravelly fine sandy loam, 2 to 8 percent slopes—5 percent

Characteristics of the Bombadil Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basic igneous rock
Slope range: 4 to 15 percent
Elevation: 4,700 to 5,500 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 1 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 6 inches
Texture: Loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 10 inches
Texture: Clay loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 20 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.1 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Corral Soil

Classification: Xerollic Haplargids, loamy, mixed, mesic, shallow
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from tuff
Slope range: 4 to 15 percent
Elevation: 4,700 to 5,500 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 12 inches
Texture: Loam
Structure: Angular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.8 to 3.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.32; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Back slopes and shoulders of plateaus
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 2
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terrace remnants adjacent to the lower shoulders of plateaus
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Inclusion 3
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Lake plain terrace remnants adjacent to the lower shoulders of plateaus
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Bombadil and Corral soils—VIIs, nonirrigated
Range site: Bombadil soil—023XY006NV; Corral soil—023XY006NV; Inclusion 1—023XY006NV; Inclusion 2—024XY004NV; Inclusion 3—023XY038NV

310—Jaybee-Pickup association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Jaybee very cobbly sandy loam, 4 to 30 percent slopes—70 percent
• Pickup very stony loam, 30 to 50 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—6 percent
• Inclusion 2: Jaybee very cobbly sandy loam, 30 to 50 percent slopes—4 percent
• Inclusion 3: Manogue cobbly clay, 2 to 8 percent slopes—3 percent
• Inclusion 4: Old Camp extremely stony loam, 30 to 50 percent slopes—2 percent

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,300 to 5,600 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Pickup Soil

Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,600 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 34 inches
Texture: Very gravelly clay
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.2 to 4.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None
Inclusion 2
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Back slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 3
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Toe slopes and summits of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 4

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-facing back slopes of plateaus
Distinctive present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Interpretive Groups

Capability classification: Jaybee and Pickup soils—VIIs, nonirrigated
Range site: Jaybee soil—023XY047NV; Pickup soil—023XY037NV; Inclusion 1—none; Inclusion 2—023XY047NV; Inclusion 3—023XY047NV; Inclusion 4—026XY022NV

312—Jaybee-Old Camp-Reywat association

Map Unit Setting

Position on landscape: Plateau remnants

Composition

Major components:
• Jaybee very cobbly sandy loam, 4 to 30 percent slopes—45 percent
• Old Camp very stony loam, 30 to 50 percent slopes—25 percent
• Reywat very stony loam, 30 to 50 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Zorravista fine sand, 4 to 30 percent slopes—5 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Skedaddle very stony loam, 15 to 50 percent slopes—3 percent
• Inclusion 4: Bombadil very stony fine sandy loam, 2 to 85 percent slopes—3 percent

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateau remnants
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,300 to 5,600 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Old Camp Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-facing back slopes of plateau remnants
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,600 feet
Dominant present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 15 percent; pebbles, 35 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 14 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of plateau remnants
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,600 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1

Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on plateau remnants
Distinctive present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Inclusion 2
Position on landscape: Summits of plateaus
Distinctive present vegetation: None
Inclusion 3
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: South-facing, slightly convex side slopes of plateau remnants
Distinctive present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass
Inclusion 4
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Slightly convex crests of hills
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Interpretive Groups

Capability classification: Jaybee, Old Camp, and Reywat soils—VIIs, nonirrigated
Range site: Jaybee soil—023XY047NV; Old Camp soil—026XY022NV; Reywat soil—023XY039NV; Inclusion 1—023XY011NV; Inclusion 2—none; Inclusion 3—023XY030NV; Inclusion 4—023XY006NV

313—Jaybee-Bombadil-Old Camp association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Jaybee very cobbly sandy loam, 8 to 30 percent slopes—50 percent
• Bombadil very stony loam, 2 to 8 percent slopes—20 percent
• Old Camp very stony loam, 30 to 50 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Manogue cobbly clay, 2 to 8 percent slopes—6 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Chalco very stony loam, 15 to 50 percent slopes—4 percent
• Inclusion 4: Veta very stony loam, 0 to 4 percent slopes—1 percent

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 8 to 30 percent
Elevation: 4,300 to 5,600 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Bombadil Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic

Position on landscape: The lower areas on summits of plateaus
Parent material: Residuum derived from basic igneous rock
Slope range: 2 to 8 percent
Elevation: 4,300 to 5,600 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 6 inches
Texture: Loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 10 inches
Texture: Clay loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 20 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.1 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.32; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Old Camp Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,600 feet
Dominant present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 15 percent; pebbles, 35 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 14 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8

Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Concave summits of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None
Inclusion 3
Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Side slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 4
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Stream terraces adjacent to plateaus
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Interpretive Groups

Capability classification: Jaybee, Bombadil, and Old Camp soils—VIIs, nonirrigated
Range site: Jaybee soil—023XY047NV; Bombadil soil—023XY006NV; Old Camp soil—026XY022NV; Inclusion 1—023XY047NV; Inclusion 2—none; Inclusion 3—023XY047NV; Inclusion 4—023XY006NV

314—Jaybee-Oppio-Old Camp association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Jaybee very cobbly sandy loam, 8 to 30 percent slopes—35 percent
• Oppio very stony loam, 15 to 50 percent slopes—30 percent
• Old Camp very stony loam, 30 to 50 percent slopes—20 percent

Contrasting inclusions:
• Inclusion 1: Manogue very cobbly clay, 4 to 15 percent slopes—8 percent
• Inclusion 2: Reywat very stony loam, 15 to 50 percent slopes—3 percent
• Inclusion 3: Rock outcrop—2 percent
• Inclusion 4: Xerollic Camborthids cobbly loam, 4 to 15 percent slopes—2 percent

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Crests and convex shoulders of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 8 to 30 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches

Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Oppio Soil

Classification: Xerollic Haplargids, fine, montmorillonitic, mesic
Position on landscape: South-, west-, and east-facing, concave shoulders and back slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 30 percent; pebbles, 40 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 22 inches
Texture: Gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, very firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 22 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.7 to 5.5 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Old Camp Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South- and west-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 15 percent; pebbles, 35 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 14 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None

Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Concave crests of mountains
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing side slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 3
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None
Inclusion 4
Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: The lower lake terraces on toe slopes of mountains
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Interpretive Groups

Capability classification: Jaybee, Oppio, and Old Camp soils—VIIs, nonirrigated
Range site: Jaybee soil—023XY047NV; Oppio soil—023XY047NV; Old Camp soil—026XY022NV; Inclusion 1—023XY047NV; Inclusion 2—023XY039NV; Inclusion 3—none; Inclusion 4—023XY006NV

315—Jaybee-Bombadil-Rock outcrop association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Jaybee very cobbly sandy loam, 8 to 15 percent slopes—45 percent
• Bombadil very stony loam, 8 to 15 percent slopes—25 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Reywat very stony loam, 8 to 30 percent slopes—6 percent
• Inclusion 2: Old Camp very stony loam, 30 to 50 percent slopes—4 percent
• Inclusion 3: Pickup very stony loam, 30 to 50 percent slopes—3 percent
• Inclusion 4: Manogue very cobbly clay, 2 to 8 percent slopes—2 percent

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 8 to 15 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Bombadil Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: South-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basic igneous rock
Slope range: 8 to 15 percent
Elevation: 4,300 to 5,700 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 6 inches
Texture: Loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 10 inches
Texture: Clay loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 20 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.1 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.32; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Summits and shoulders of plateaus
Kind of rock: Basic igneous rock

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing side slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 2
Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-facing back slopes of plateaus
Distinctive present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Inclusion 3
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: The higher, north-facing back slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Inclusion 4

Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Concave summits of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability classification: Jaybee and Bombadil soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Jaybee soil—023XY047NV; Bombadil soil—023XY006NV; Rock outcrop—none; Inclusion 1—023XY039NV; Inclusion 2—026XY022NV; Inclusion 3—023XY037NV; Inclusion 4—023XY047NV

316—Jaybee-Manogue-Fulstone association

Map Unit Setting

Position on landscape: Fan piedmonts and plateau remnants

Composition

Major components:
• Jaybee very cobbly sandy loam, 4 to 30 percent slopes—50 percent
• Manogue very cobbly clay, 2 to 8 percent slopes—25 percent
• Fulstone very stony loam, 2 to 8 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Bombadil very stony fine sandy loam, 4 to 15 percent slopes—5 percent
• Inclusion 2: Rock outcrop—3 percent
• Inclusion 3: Smaug very fine sandy loam, 4 to 15 percent slopes—2 percent

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateau remnants
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,400 to 5,200 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Manogue Soil

Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Concave summits of plateau remnants
Parent material: Residuum and colluvium derived from basalt
Slope range: 2 to 8 percent
Elevation: 4,400 to 5,200 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 1 percent; cobbles, 40 percent; pebbles, 10 percent

Depth: 0 to 4 inches
Texture: Very cobbly clay
Structure: Granular
Consistence: Hard, very firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 25 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, very firm
Reaction: Mildly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 25 to 47 inches
Texture: Clay
Structure: Prismatic
Consistence: Hard, firm
Reaction: Moderately alkaline
Salinity: 2 to 8 mmhos per cm
Sodicity: SAR less than 2

Depth: 47 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 5.6 to 8.3 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—3; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Fulstone Soil

Classification: Abruptic Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Summits of fan piedmont remnants
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 4,400 to 5,200 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 5 inches
Texture: Very stony loam
Structure: Platy parting to granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 17 inches
Texture: Clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 to 40 inches
Texture: Indurated hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Crests and shoulders of hills
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 2
Position on landscape: Crests and side slopes of hills
Distinctive present vegetation: None
Inclusion 3
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake terraces superimposed on toe slopes of plateau remnants
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Jaybee, Manogue, and Fulstone soils—VIIs, nonirrigated
Range site: Jaybee soil—023XY047NV; Manogue soil—023XY047NV; Fulstone soil—023XY047NV; Inclusion 1—023XY006NV; Inclusion 2—none; Inclusion 3—024XY004NV

317—Jaybee-Corral-Oppio association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Jaybee very cobbly sandy loam, 4 to 30 percent slopes—45 percent
• Corral very stony sandy loam, 4 to 30 percent slopes—25 percent
• Oppio very stony loam, 2 to 8 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Reywat very stony loam, 15 to 50 percent slopes—5 percent
• Inclusion 2: Rock outcrop—5 percent
• Inclusion 3: Bombadil very stony fine sandy loam, 4 to 15 percent slopes—3 percent
• Inclusion 4: Verdi very stony fine sandy loam, 4 to 15 percent slopes—2 percent

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,400 to 5,300 feet
Dominant present vegetation: Lanontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Corral Soil

Classification: Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Concave shoulders and back slopes of plateaus
Parent material: Residuum and colluvium derived from tuff
Slope range: 4 to 30 percent
Elevation: 4,400 to 5,300 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches

Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 12 inches
Texture: Loam
Structure: Angular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.8 to 3.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Oppio Soil

Classification: Xerollic Haplargids, fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 2 to 8 percent
Elevation: 4,400 to 5,300 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 30 percent; pebbles, 40 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 27 inches
Texture: Gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, very firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 27 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.7 to 5.5 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing, convex back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 2
Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None
Inclusion 3
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Crests of hills and summits of plateaus
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 4
Classification: Xerollic Paleargids, fine, montmorillonitic, mesic
Position on landscape: Concave shoulders of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability classification: Jaybee, Corral, and Oppio soils—VIIs, nonirrigated
Range site: Jaybee soil—023XY047NV; Corral soil—023XY006NV; Oppio soil—023XY047NV; Inclusion 1—023XY039NV; Inclusion 2—none; Inclusion 3—023XY006NV; Inclusion 4—023XY047NV

318—Jaybee-Reywat association

Map Unit Setting

Position on landscape: Back slopes of plateaus

Composition

Major components:
• Jaybee very cobbly loam, 8 to 30 percent slopes—55 percent
• Reywat very cobbly sandy loam, 15 to 50 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Reywat very cobbly loam, 50 to 75 percent slopes—8 percent
• Inclusion 2: Aridic Argixerolls stony loam, 4 to 15 percent slopes—5 percent
• Inclusion 3: Rock outcrop—2 percent

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: South- and west-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 8 to 30 percent
Elevation: 4,800 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 30 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,800 to 5,700 feet

Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Cobbles, 25 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing, concave back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 2
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: Alluvial fans adjacent to toe slopes of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 3
Position on landscape: Summits and side slopes of plateaus
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Jaybee and Reywat soils—VIIs, irrigated
Range site: Jaybee soil—023XY047NV; Reywat soil—023XY039NV; Inclusion 1—023XY039NV; Inclusion 2—023XY031NV; Inclusion 3—none

330—Hart Camp-Devada association

Map Unit Setting

Position on landscape: Plateau remnants

Composition

Major components:
• Hart Camp very stony loam, 8 to 15 percent slopes—65 percent
• Devada extremely stony loam, 2 to 8 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Typic Haplaquolls silt loam, 0 to 2 percent slopes—6 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Tunnison very cobbly clay, 0 to 8 percent slopes—4 percent
• Inclusion 4: Cumulic Haplaquolls silt loam, 0 to 2 percent slopes—1 percent

Characteristics of the Hart Camp Soil

Classification: Aridic Argixerolls, loamy, mixed, frigid, shallow
Position on landscape: Shoulders of plateau remnants
Parent material: Residuum and colluvium derived from tuff

Slope range: 8 to 15 percent
Elevation: 5,500 to 5,900 feet
Dominant present vegetation: Mountain big sagebrush, antelope bitterbrush, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 70 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 5 percent; pebbles, 5 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 15 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 to 19 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.7 to 3.4 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.24; T value—1; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Small summits of plateau remnants
Parent material: Residuum derived from basalt
Slope range: 2 to 8 percent
Elevation: 5,500 to 5,900 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 25 percent; pebbles, 20 percent

Depth: 0 to 4 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1

Classification: Typic Haplaquolls, fine-silty, mixed, frigid
Position on landscape: Seeps on side slopes of plateau remnants and the adjacent stream terraces

Distinctive present vegetation: Basin big sagebrush, basin wildrye

Inclusion 2

Position on landscape: Summits of plateaus
Distinctive present vegetation: None

Inclusion 3

Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Summits of plateau remnants
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 4

Classification: Cumulic Haplaquolls, fine-silty, mixed, frigid
Position on landscape: Toe slopes of plateaus adjacent to springs
Distinctive present vegetation: Rubber rabbitbrush, rush, sedge

Interpretive Groups

Capability classification: Hart Camp and Devada soils—VIIs, nonirrigated
Range site: Hart Camp soil—023XY015NV; Devada soil—023XY031NV; Inclusion 1—023XY009NV; Inclusion 2—none; Inclusion 3—023XY044NV; Inclusion 4—023XY025NV

340—Reywat-Rock outcrop complex, 15 to 50 percent slopes

Map Unit Setting

Position on landscape: Side slopes of mountains

Composition

Major components:
• Reywat extremely stony loam, 15 to 50 percent slopes—65 percent
• Rock outcrop—25 percent
Contrasting inclusions:
• Inclusion 1: Softscrabble very stony loam, 30 to 75 percent slopes—8 percent
• Inclusion 2: Bucklake very stony loam, 30 to 50 percent slopes—2 percent

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Shoulders and back slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,600 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 15 percent; cobbles, 5 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Summits and side slopes of mountains
Kind of rock: Basalt

Contrasting Inclusions

Inclusion 1
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Slightly concave back slopes of mountains at the higher elevations
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye
Inclusion 2
Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South-facing back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Interpretive Groups

Capability classification: Reywat soil—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Reywat soil—023XY039NV; Rock outcrop—none; Inclusion 1—023XY041NV; Inclusion 2—023XY039NV

344—Reywat-Ister association

Map Unit Setting

Position on landscape: Back slopes of hills

Composition

Major components:
• Reywat very cobbly sandy loam, 8 to 30 percent slopes—75 percent
• Ister very stony loam, 30 to 50 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Terca very gravelly loam, 30 to 50 percent slopes—5 percent
• Inclusion 2: Softscrabble stony loam, 30 to 50 percent slopes—3 percent
• Inclusion 3: Rock outcrop—2 percent

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Convex back slopes of hills
Parent material: Residuum and colluvium derived from andesite or rhyolite
Slope range: 8 to 30 percent
Elevation: 5,400 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free season: About 80 days

Typical Profile

Surface cover: Cobbles, 25 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Ister Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of hills
Parent material: Residuum and colluvium derived from andesite or rhyolite
Slope range: 30 to 50 percent
Elevation: 5,400 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free season: About 80 days

Typical Profile

Surface cover: Stones and boulders, 15 percent; pebbles, 35 percent

Depth: 0 to 17 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 to 38 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 38 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 2.7 to 4.3 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: South-facing back slopes of hills
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 2
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing, concave back slopes of hills
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye
Inclusion 3
Position on landscape: Ridges and side slopes of hills
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Reywat and Ister soils—VIIs, nonirrigated
Range site: Reywat soil—023XY039NV; Ister soil—023XY039NV; Inclusion 1—023XY039NV; Inclusion 2—023XY041NV; Inclusion 3—none

362—Brubeck very cobbly clay, 0 to 4 percent slopes

Map Unit Setting

Position on landscape: Summits of plateaus

Composition

Major component:
• Brubeck very cobbly clay, 0 to 4 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—5 percent
• Inclusion 2: Brubeck extremely stony clay, 0 to 4 percent slopes—5 percent

Characteristics of the Brubeck Soil

Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Summits of plateaus
Parent material: Residuum and colluvium derived from volcanic rock
Slope range: 0 to 4 percent
Elevation: 4,500 to 5,400 feet
Dominant present vegetation: Basin big sagebrush, oneflower helianthella, western wheatgrass

Climatic Data

Average annual precipitation: About 10 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 45 percent; pebbles, 5 percent

Depth: 0 to 3 inches
Texture: Very cobbly clay
Structure: Granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 29 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral or moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 29 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.7 to 5.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Slow
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Position on landscape: Summits of plateaus
Distinctive present vegetation: None
Inclusion 2
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Summits of plateaus
Distinctive present vegetation: Basin big sagebrush, oneflower helianthella, western wheatgrass

Interpretive Groups

Capability classification: Brubeck soil—VIs, nonirrigated
Range site: Brubeck soil—023XY033NV; Inclusion 1—none; Inclusion 2—023XY033NV

370—Terca-Softscrabble-Rock outcrop association

Map Unit Setting

Position on landscape: Side slopes of mountains

Composition

Major components:
• Terca very stony loam, 50 to 75 percent slopes—50 percent
• Softscrabble very stony loam, 30 to 50 percent slopes—20 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Softscrabble stony loam, 50 to 75 percent slopes—9 percent
• Inclusion 2: Devada very cobbly loam, 4 to 15 percent slopes—4 percent
• Inclusion 3: Pickup stony loam, 15 to 50 percent slopes—2 percent

Characteristics of the Terca Soil

Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: South-facing side slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 50 to 75 percent
Elevation: 4,500 to 7,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 17 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.3 to 1.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing side slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 30 to 50 percent
Elevation: 4,500 to 7,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Ridges and side slopes of mountains
Kind of rock: Andesite or basalt

Contrasting Inclusions

Inclusion 1
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Inclusion 2
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Crests of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass

Inclusion 3
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: The lower, south-, west-, and east-facing side slopes of mountains
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Interpretive Groups

Capability classification: Terca and Softscrabble soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Terca soil—023XY039NV; Softscrabble soil—023XY041NV; Rock outcrop—none; Inclusion 1—023XY007NV; Inclusion 2—023XY031NV; Inclusion 3—023XY037NV

371—Terca-Devada-Rock outcrop association

Map Unit Setting

Position on landscape: Back slopes of mountains

Composition

Major components:
• Terca very stony loam, 50 to 75 percent slopes—50 percent
• Devada very stony loam, 30 to 50 percent slopes—20 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Reywat very stony loam, 30 to 50 percent slopes—5 percent
• Inclusion 2: Softscrabble very stony loam, 30 to 50 percent slopes—4 percent
• Inclusion 3: Bucklake very stony loam, 15 to 30 percent slopes—4 percent
• Inclusion 4: Skedaddle very stony loam, 30 to 50 percent slopes—2 percent

Characteristics of the Terca Soil

Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: Back slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 50 to 75 percent
Elevation: 5,000 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 17 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.3 to 1.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Convex back slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 30 to 50 percent
Elevation: 5,000 to 6,000 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 15 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.02; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Rock Outcrop

Position on landscape: Back slopes of mountains
Kind of rock: Andesite or basalt

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: The higher, west-facing back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 2
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Concave, north-facing side slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Inclusion 3
Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: Concave, south-, east-, and west-facing side slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 4
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: The lower, convex, south-facing side slopes of mountains
Distinctive present vegetation: Wyoming big sagebrush, Indian ricegrass, spiny hopsage

Interpretive Groups

Capability classification: Terca and Devada soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Terca soil—023XY039NV; Devada soil—023XY031NV; Rock outcrop—none; Inclusion 1—023XY039NV; Inclusion 2—023XY007NV; Inclusion 3—023XY039NV; Inclusion 4—023XY030NV

372—Terca-Devada association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Terca very stony loam, 15 to 50 percent slopes—70 percent
• Devada very stony loam, 4 to 15 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Softscrabble very stony loam, 30 to 50 percent slopes—9 percent
• Inclusion 2: Rock outcrop—6 percent

Characteristics of the Terca Soil

Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: Shoulders and back slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 15 to 50 percent
Elevation: 5,000 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 17 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.3 to 1.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Crests of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 4 to 15 percent
Elevation: 5,000 to 6,000 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 15 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Inclusion 2
Position on landscape: Ridges and side slopes of mountains
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Terca and Devada soils—VIIs, nonirrigated
Range site: Terca soil—023XY039NV; Devada soil—023XY031NV; Inclusion 1—023XY041NV; Inclusion 2—none

373—Terca-Softscrabble-Devada association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Terca very stony loam, 15 to 50 percent slopes—40 percent
• Softscrabble stony loam, 30 to 50 percent slopes—25 percent
• Devada very stony loam, 15 to 30 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Aridic Argixerolls stony loam, 2 to 15 percent slopes—6 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Bucklake very stony loam, 30 to 50 percent slopes—3 percent
• Inclusion 4: Devada very cobbly loam, 8 to 15 percent slopes—2 percent

Characteristics of the Terca Soil

Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: South- and west-facing, convex side slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 15 to 50 percent
Elevation: 5,200 to 6,200 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 17 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.3 to 1.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Concave, north-facing back slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 30 to 50 percent
Elevation: 5,200 to 6,200 feet
Dominant present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 20 inches
Texture: Stony loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—3; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Shoulders of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 15 to 30 percent
Elevation: 5,200 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 15 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: Stream terraces
Distinctive present vegetation: Basin big sagebrush, basin wildrye
Inclusion 2
Position on landscape: Ridges and side slopes of mountains
Distinctive present vegetation: None
Inclusion 3
Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: The lower, south- and west-facing back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 4
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Crests of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass

Interpretive Groups

Capability classification: Terca and Devada soils—VIIs; Softscrabble soil—VIIs, nonirrigated
Range site: Terca soil—023XY039NV; Softscrabble soil—023XY007NV; Devada soil—023XY031NV; Inclusion 1—023XY009NV; Inclusion 2—none; Inclusion 3—023XY039NV; Inclusion 4—023XY031NV

374—Terca-Reywat-Wylo association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Terca very stony loam, 15 to 50 percent slopes—40 percent
• Reywat very stony loam, 15 to 50 percent slopes—35 percent
• Wylo very stony loam, 4 to 30 percent slopes—10 percent
Contrasting inclusions:
• Inclusion 1: Skedaddle very stony sandy loam, 50 to 75 percent slopes—6 percent
• Inclusion 2: Softscrabble very stony loam, 15 to 50 percent slopes—4 percent
• Inclusion 3: Rock outcrop—3 percent
• Inclusion 4: Pickup very stony loam, 15 to 50 percent slopes—2 percent

Characteristics of the Terca Soil

Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: South- and west-facing back slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 15 to 50 percent
Elevation: 5,500 to 8,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Granular
Consistence: Soft, very friable

Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 17 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.3 to 1.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North- and east-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 5,500 to 8,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, friable

Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Convex crests and shoulders of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 4 to 30 percent
Elevation: 5,500 to 8,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: Convex side slopes of mountains
Distinctive present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Inclusion 2
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing, concave back slopes of mountains at the higher elevations
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Inclusion 3
Position on landscape: Ridges and the upper side slopes of mountains
Distinctive present vegetation: None
Inclusion 4
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North- and east-facing side slopes of mountains at the lower elevations
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Interpretive Groups

Capability classification: Terca, Reywat, and Wylo soils—VIIs, nonirrigated
Range site: Terca soil—023XY039NV; Reywat soil—023XY039NV; Wylo soil—023XY037NV; Inclusion 1—023XY030NV; Inclusion 2—023XY041NV; Inclusion 3—none; Inclusion 4—023XY037NV

420—Fulstone-Wylo association

Map Unit Setting

Position on landscape: Fan piedmont remnants and plateau remnants

Composition

Major components:
• Fulstone very stony loam, 2 to 8 percent slopes—70 percent
• Wylo very stony loam, 8 to 30 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Fulstone stony clay loam, 2 to 8 percent slopes—4 percent
• Inclusion 2: Jaybee very cobbly sandy loam, 4 to 30 percent slopes—4 percent
• Inclusion 3: Rock outcrop—2 percent

Characteristics of the Fulstone Soil

Classification: Abruptic Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Fan piedmont remnants superimposed on plateau remnants
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy parting to granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 14 inches
Texture: Clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 to 60 inches
Texture: Indurated hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Summits and shoulders of plateau remnants
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 8 to 30 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Abruptic Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Fan piedmont remnants
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 2
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: The lower areas on summits and shoulders of plateau remnants
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 3
Position on landscape: Plateau remnants
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Fulstone and Wylo soils—VIIs, nonirrigated
Range site: Fulstone soil—023XY047NV; Wylo soil—023XY037NV; Inclusion 1—023XY047NV; Inclusion 2—023XY047NV; Inclusion 3—none

421—Fulstone-Chalco association

Map Unit Setting

Position on landscape: Fan piedmonts superimposed on pediments

Composition

Major components:
• Fulstone very stony loam, 4 to 8 percent slopes—65 percent
• Chalco very stony loam, 8 to 15 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Buffaran cobbly clay loam, 2 to 8 percent slopes—6 percent
• Inclusion 2: Aquic Torriorthents loam, 0 to 8 percent slopes—4 percent
• Inclusion 3: Rock outcrop—3 percent
• Inclusion 4: Xerollic Haplargids cobbly sandy loam, 2 to 8 percent slopes—2 percent

Characteristics of the Fulstone Soil

Classification: Abruptic Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Summits of fan piedmont remnants superimposed on pediment remnants
Parent material: Mixed alluvium
Slope range: 4 to 8 percent
Elevation: 4,400 to 5,300 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 5 inches
Texture: Very stony loam
Structure: Platy parting to granular

Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 17 inches
Texture: Clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 to 40 inches
Texture: Indurated hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Chalco Soil

Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Back slopes of pediment remnants
Parent material: Residuum and colluvium derived from tuff
Slope range: 8 to 15 percent
Elevation: 4,400 to 5,300 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 8 percent; cobbles, 8 percent; pebbles, 35 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 15 inches
Texture: Clay
Structure: Angular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 1.3 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.10: T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Summits of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 2
Classification: Aquic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: Toe slopes of pediments adjacent to seeps
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Inclusion 3
Distinctive present vegetation: None

Inclusion 4
Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Fan aprons superimposed on fan piedmonts

Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Fulstone and Chalco soils—VIIs, nonirrigated
Range site: Fulstone soil—023XY047NV; Chalco soil—023XY047NV; Inclusion 1—023XY006NV; Inclusion 2—024XY006NV; Inclusion 3—none; Inclusion 4—023XY038NV

422—Fulstone very stony loam, 4 to 15 percent slopes

Map Unit Setting

Position on landscape: Fan piedmont remnants

Composition

Major component:
• Fulstone very stony loam, 4 to 8 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Xerollic Durargids very gravelly loam, 15 to 30 percent slopes—5 percent
• Inclusion 2: Typic Durargids very gravelly sandy loam, 8 to 15 percent slopes—4 percent
• Inclusion 3: Xerollic Haplargids very gravelly sandy loam, 2 to 8 percent slopes—3 percent
• Inclusion 4: Aquic Torriorthents fine sandy loam, 2 to 15 percent slopes—3 percent

Characteristics of the Fulstone Soil

Classification: Abruptic Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Summits and shoulders of fan piedmont remnants
Parent material: Mixed alluvium
Slope range: 4 to 8 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 5 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 17 inches
Texture: Clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 to 40 inches
Texture: Indurated hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Durargids, fine-loamy, mixed, mesic
Position on landscape: Side slopes of fan piedmont remnants
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Classification: Typic Durargids, fine, montmorillonitic, mesic
Position on landscape: The lower areas on summits of fan piedmont remnants
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Inset fans and fan aprons
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 4
Classification: Aquic Torriorthents, fine-loamy, mixed (calcareous), mesic

Position on landscape: Fan piedmont remnants adjacent to seeps
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Interpretive Groups

Capability classification: Fulstone soil—VIIs, nonirrigated
Range site: Fulstone soil—023XY047NV; Inclusion 1—023XY047NV; Inclusion 2—024XY002NV; Inclusion 3—023XY038NV; Inclusion 4—024XY006NV

441—Rezave-Theon association

Map Unit Setting

Position on landscape: Hills

Composition

Major components:
• Rezave very gravelly loam, 4 to 30 percent slopes—65 percent
• Theon very gravelly loam, 8 to 30 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Fluventic Haploxerolls stony loam, 2 to 4 percent slopes—3 percent
• Inclusion 2: Xeric Torriorthents very gravelly loamy sand, 2 to 4 percent slopes—3 percent
• Inclusion 3: Singatse very gravelly loam, 15 to 50 percent slopes—2 percent
• Inclusion 4: Rock outcrop—2 percent

Characteristics of the Rezave Soil

Classification: Lithic Natrargids, clayey, montmorillonitic, mesic
Position on landscape: Slightly concave crests and shoulders of hills
Parent material: Residuum derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,300 to 5,000 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 25 percent; pebbles, 50 percent

Depth: 0 to 2 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 2 to 15 inches
Texture: Clay loam
Structure: Prismatic, angular blocky
Consistence: Slightly hard, friable
Reaction: Strongly alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR 13 to 30

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.6 to 2.3 inches
Water-supplying capacity: 6 to 8 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Theon Soil

Classification: Lithic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Slightly convex crests and shoulders of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 8 to 30 percent
Elevation: 4,300 to 5,000 feet
Dominant present vegetation: Shadscale, Bailey greasewood, bottlebrush squirreltail, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 2 inches
Texture: Very gravelly loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 2 to 11 inches
Texture: Very gravelly loam, very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 11 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 8 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 5 to 7 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Fluventic Haploxerolls, loamy-skeletal, mixed, mesic
Position on landscape: Stream terraces adjacent to toe slopes of hills
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye
Inclusion 2
Classification: Xeric Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Channels adjacent to toe slopes of hills
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage
Inclusion 3
Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Back slopes of hills
Distinctive present vegetation: Shadscale, desert needlegrass
Inclusion 4
Position on landscape: Crests and side slopes of hills
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Rezave and Theon soils—VIIs, nonirrigated
Range site: Rezave soil—027XY013NV; Theon soil—027XY019NV; Inclusion 1—023XY005NV; Inclusion 2—027XY029NV; Inclusion 3—027XY027NV; Inclusion 4—none

460—Chill-Jaybee association

Map Unit Setting

Position on landscape: Back slopes of hills

Composition

Major components:
• Chill very stony sandy loam, 30 to 50 percent slopes—50 percent
• Jaybee very cobbly loam, 30 to 50 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Ister very cobbly loam, 15 to 50 percent slopes—5 percent
• Inclusion 2: Xerollic Haplargids stony loam, 2 to 15 percent slopes—4 percent
• Inclusion 3: Chill very stony loam, 4 to 15 percent slopes—4 percent
• Inclusion 4: Rock outcrop—2 percent

Characteristics of the Chill Soil

Classification: Xerollic Haplargids, loamy, mixed, mesic, shallow
Position on landscape: Back slopes of hills
Parent material: Residuum and colluvium derived from granite
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 2 inches
Texture: Very stony sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 14 inches
Texture: Gravelly sandy clay loam
Structure: Subangular blocky
Consistence: Hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 to 21 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 6 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.5 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Back slopes of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 30 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of hills
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 2
Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Toe slopes of hills
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 3
Classification: Xerollic Haplargids, loamy, mixed, mesic, shallow
Position on landscape: Crests of hills
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 4
Position on landscape: Crests and side slopes of hills
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Chill and Jaybee soils—VIIs, nonirrigated
Range site: Chill soil—023XY006NV; Jaybee soil—023XY047NV; Inclusion 1—023XY039NV; Inclusion

2—023XY006NV; Inclusion 3—023XY006NV; Inclusion 4—none

491—Oppio very stony loam, 4 to 15 percent slopes

Map Unit Setting

Position on landscape: Summits of plateaus

Composition

Major component:
• Oppio very stony loam, 4 to 15 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Manogue cobbly clay, 2 to 8 percent slopes—3 percent
• Inclusion 2: Haybourne gravelly sandy loam, 2 to 8 percent slopes—3 percent
• Inclusion 3: Zorravista fine sand, 4 to 15 percent slopes—3 percent
• Inclusion 4: Rock outcrop—1 percent

Characteristics of the Oppio Soil

Classification: Xerollic Haplargids, fine, montmorillonitic, mesic
Position on landscape: Summits of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 15 percent
Elevation: 4,300 to 5,000 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 30 percent; pebbles, 40 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 27 inches
Texture: Gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, very firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 27 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.7 to 5.5 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Alluvial fans adjacent to toe slopes of hills
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 3
Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on plateaus
Distinctive present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass
Inclusion 4
Position on landscape: Rims of plateaus
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Oppio soil—VIIs, nonirrigated
Range site: Oppio soil—023XY047NV; Inclusion 1—023XY047NV; Inclusion 2—023XY006NV; Inclusion 3—023XY011NV; Inclusion 4—none

500—Smaug very fine sandy loam, 2 to 8 percent slopes

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major component:
• Smaug very fine sandy loam, 2 to 8 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Typic Camborthids fine sandy loam, 2 to 8 percent slopes—8 percent
• Inclusion 2: Swingler fine sandy loam, 0 to 4 percent slopes—4 percent
• Inclusion 3: Typic Torriorthents very fine sandy loam, 8 to 30 percent slopes—2 percent
• Inclusion 4: Zorravista fine sand, 2 to 8 percent slopes—1 percent

Characteristics of the Smaug Soil

Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Silty lacustrine material
Slope range: 2 to 8 percent
Elevation: 4,000 to 4,400 feet
Dominant present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Very fine sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 10 to 60 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 8.3 to 9.5 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Fan aprons below lake plain terraces
Distinctive present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush
Inclusion 3
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Side slopes of lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 4
Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Interpretive Groups

Capability classification: Smaug soil—VIIs, nonirrigated
Range site: Smaug soil—024XY004NV; Inclusion 1—024XY014NV; Inclusion 2—024XY003NV; Inclusion 3—024XY002NV; Inclusion 4—023XY011NV

510—Bucklake-Bombadil-Reywat association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Bucklake extremely stony loam, 30 to 50 percent slopes—40 percent
• Bombadil very stony loam, 4 to 15 percent slopes—30 percent
• Reywat very stony loam, 30 to 50 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—5 percent
• Inclusion 2: Devada very stony loam, 2 to 15 percent slopes—3 percent
• Inclusion 3: Skedaddle stony loam, 15 to 50 percent slopes—2 percent

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South-facing side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,900 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Bombadil Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Summits of plateaus
Parent material: Residuum and colluvium derived from basic igneous rock
Slope range: 4 to 15 percent
Elevation: 4,400 to 5,900 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 6 inches
Texture: Loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 10 inches
Texture: Clay loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 20 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.1 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.32; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,900 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Position on landscape: Rims of plateaus
Distinctive present vegetation: None

Inclusion 2
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass

Inclusion 3
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: Slightly convex side slopes of plateaus

Distinctive present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Interpretive Groups

Capability classification: Bucklake, Bombadil, and Reywat soils—VIIs, nonirrigated
Range site: Bucklake soil—023XY039NV; Bombadil soil—023XY006NV; Reywat soil—023XY039NV; Inclusion 1—none; Inclusion 2—023XY031NV; Inclusion 3—023XY030NV

511—Bucklake-Corral-Rubble land association

Map Unit Setting

Position on landscape: Side slopes of plateaus

Composition

Major components:
• Bucklake extremely stony loam, 30 to 50 percent slopes—40 percent
• Corral extremely stony loam, 30 to 50 percent slopes—25 percent
• Rubble land—20 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—5 percent
• Inclusion 2: Reywat very stony loam, 30 to 50 percent slopes—5 percent
• Inclusion 3: Corral extremely stony loam, 50 to 75 percent slopes—3 percent
• Inclusion 4: Chalco very stony loam, 15 to 50 percent slopes—2 percent

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: The upper side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 4,300 to 4,700 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Corral Soil

Classification: Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: The lower side slopes of plateaus
Parent material: Residuum and colluvium derived from tuff
Slope range: 30 to 50 percent
Elevation: 4,300 to 4,700 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 25 percent; cobbles, 10 percent; pebbles, 5 percent

Depth: 0 to 6 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 15 inches
Texture: Loam
Structure: Angular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.8 to 3.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Rubble Land

Position on landscape: Side slopes of plateaus
Parent material: Colluvium derived from volcanic rock
Surface cover: Stones, boulders, and cobbles, 90 to 100 percent

Contrasting Inclusions

Inclusion 1
Position on landscape: Rims of plateaus
Distinctive present vegetation: None

Inclusion 2
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 3
Classification: Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 4
Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Toe slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Interpretive Groups

Capability classification: Bucklake and Corral soils—VIIs, nonirrigated; Rubble land—VIIIs
Range site: Bucklake soil—023XY039NV; Corral soil—023XY039NV; Rubble land—none; Inclusion 1—none; Inclusion 2—023XY039NV; Inclusion 3—023XY039NV; Inclusion 4—023XY037NV

513—Bucklake-Reywat association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Bucklake extremely stony loam, 30 to 50 percent slopes—60 percent
• Reywat very stony loam, 30 to 50 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Bombadil very stony fine sandy loam, 2 to 15 percent slopes—5 percent
• Inclusion 2: Softscrabble very stony loam, 15 to 50 percent slopes—4 percent
• Inclusion 3: Devada very stony loam, 4 to 30 percent slopes—3 percent
• Inclusion 4: Fluventic Haploxerolls very stony loam, 2 to 8 percent slopes—3 percent

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South-facing side slopes of mountains

Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: North-facing side slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow

Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: The lower crests and shoulders of hills and mountains
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 2
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: The higher, north-facing shoulders and back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye
Inclusion 3
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Shoulders and summits of plateau remnants and mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 4
Classification: Fluventic Haploxerolls, fine-loamy, mixed, mesic
Position on landscape: Stream terraces adjacent to toe slopes of mountains
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Interpretive Groups

Capability classification: Bucklake and Reywat soils—VIIs, nonirrigated
Range site: Bucklake soil—023XY039NV; Reywat soil—023XY039NV; Inclusion 1—023XY006NV; Inclusion 2—023XY041NV; Inclusion 3—023XY031NV; Inclusion 4—023XY009NV

515—Bucklake-Reywat-Devada association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Bucklake extremely stony loam, 30 to 50 percent slopes—45 percent
• Reywat very stony loam, 4 to 30 percent slopes—30 percent
• Devada extremely stony loam, 2 to 8 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Hart Camp very stony loam, 30 to 50 percent slopes—6 percent
• Inclusion 2: Rock outcrop—3 percent
• Inclusion 3: Cumulic Haplaquolls stony loam, 2 to 30 percent slopes—1 percent

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: Side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 5,000 to 6,200 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Reywat Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 5,000 to 6,200 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 18 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex or smooth summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 2 to 8 percent
Elevation: 5,000 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 25 percent; pebbles, 20 percent

Depth: 0 to 4 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Slight
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, loamy, mixed, frigid, shallow
Position on landscape: North-facing side slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, antelope bitterbrush, bluebunch wheatgrass
Inclusion 2
Position on landscape: Rims of plateaus
Distinctive present vegetation: None
Inclusion 3
Classification: Cumulic Haplaquolls, fine-loamy, mixed, frigid
Position on landscape: Side slopes of plateaus adjacent to springs
Distinctive present vegetation: Rubber rabbitbrush, rush, sedge

Interpretive Groups

Capability classification: Bucklake, Reywat, and Devada soils—VIIs, nonirrigated
Range site: Bucklake soil—023XY039NV; Reywat soil—023XY039NV; Devada soil—023XY031NV; Inclusion 1—023XY015NV; Inclusion 2—none; Inclusion 3—023XY025NV

517—Bucklake-Softscrabble-Devada association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Bucklake very stony loam, 15 to 50 percent slopes—35 percent
• Softscrabble very stony loam, 15 to 50 percent slopes—30 percent
• Devada very stony loam, 4 to 30 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Wylo very stony loam, 2 to 15 percent slopes—6 percent
• Inclusion 2: Xerollic Haplargids very stony sandy loam, 15 to 50 percent slopes—4 percent
• Inclusion 3: Rock outcrop—3 percent
• Inclusion 4: Cumulic Haplaquolls loam, 2 to 30 percent slopes—2 percent

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 5,000 to 6,200 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 5,000 to 6,200 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Crests and shoulders of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 5,000 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 15 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Crests and shoulders of mountains at the lower elevations
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot
Inclusion 2
Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: South-facing back slopes and toe slopes of mountains
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 3
Position on landscape: Mountain peaks
Distinctive present vegetation: None
Inclusion 4
Classification: Cumulic Haplaquolls, fine-loamy, mixed, mesic
Position on landscape: Side slopes of mountains, adjacent to springs
Distinctive present vegetation: Rubber rabbitbrush, rush, sedge

Interpretive Groups

Capability classification: Bucklake, Softscrabble, and Devada soils—VIIs, nonirrigated
Range site: Bucklake soil—023XY039NV; Softscrabble soil—023XY041NV; Devada soil—023XY031NV; Inclusion 1—023XY037NV; Inclusion 2—023XY006NV; Inclusion 3—none; Inclusion 4—023XY025NV

518—Bucklake-Pickup-Wylo association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Bucklake extremely stony loam, 15 to 50 percent slopes—35 percent
• Pickup very stony loam, 15 to 50 percent slopes—30 percent
• Wylo very stony loam, 4 to 15 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Ceejay very stony loam, 4 to 30 percent slopes—5 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Theon very stony loam, 15 to 50 percent slopes—4 percent
• Inclusion 4: Bombadil very stony sandy loam, 4 to 15 percent slopes—2 percent

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South-facing side slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent

Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Pickup Soil

Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing side slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 34 inches
Texture: Very gravelly clay
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.2 to 4.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Crests and shoulders of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 15 percent
Elevation: 4,400 to 6,000 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Crests and shoulders of mountains at the lower elevations
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 2
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None

Inclusion 3
Classification: Lithic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-facing back slopes of mountains at the lower elevations
Distinctive present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Inclusion 4
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Crests and shoulders of mountains at middle elevations
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Interpretive Groups

Capability classification: Bucklake, Pickup, and Wylo soils—VIIs, nonirrigated
Range site: Bucklake soil—023XY039NV; Pickup soil—023XY037NV; Wylo soil—023XY037NV; Inclusion 1—023XY047NV; Inclusion 2—none; Inclusion 3—027XY017NV; Inclusion 4—023XY006NV

540—Mazuma complex, 0 to 4 percent slopes

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Mazuma loamy fine sand, 0 to 2 percent slopes—60 percent
• Mazuma fine sandy loam, 0 to 4 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Isolde fine sand, 2 to 15 percent slopes—7 percent
• Inclusion 2: Swingler fine sandy loam, 0 to 2 percent slopes—4 percent
• Inclusion 3: Mastly very fine sandy loam, 0 to 2 percent slopes—3 percent

• Inclusion 4: Umberland loam, 0 to 2 percent slopes—1 percent

Characteristics of Mazuma Loamy Fine Sand

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Black greasewood, Nevada dalea, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Loamy fine sand
Structure: Single grained
Consistence: Loose
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 10 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of Mazuma Fine Sandy Loam

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Slightly concave lake plain terraces at the lower elevations
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Black greasewood, Indian ricegrass

Inclusion 2
Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush

Inclusion 3
Classification: Durorthidic Xeric Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Stream terraces cut into lake plain terraces
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye, squirreltail, Thurber needlegrass

Inclusion 4
Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye

Interpretive Groups

Capability classification: Mazuma loamy fine sand—IIs, irrigated; Mazuma loamy fine sand and Mazuma fine sandy loam—VIIs, nonirrigated
Range site: Mazuma loamy fine sand—027XY012NV; Mazuma fine sandy loam—024XY003NV; Inclusion 1—027XY016NV; Inclusion 2—024XY003NV; Inclusion 3—024XY006NV; Inclusion 4—024XY015NV

541—Mazuma fine sandy loam, 0 to 4 percent slopes

Map Unit Setting

Position on landscape: Beach terraces

Composition

Major component:
• Mazuma fine sandy loam, 0 to 4 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Trocken gravelly fine sandy loam, 0 to 4 percent slopes—8 percent
• Inclusion 2: Typic Torriorthents very fine sandy loam, 0 to 2 percent slopes—3 percent
• Inclusion 3: Hawsley loamy sand, 0 to 4 percent slopes—2 percent
• Inclusion 4: Xeric Torriorthents loam, 0 to 2 percent slopes—2 percent

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Beach terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Fan aprons superimposed on beach terraces
Distinctive present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torriorthents, fine-loamy, mixed (calcareous), mesic
Position on landscape: Lagoons adjacent to beach terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush
Inclusion 3
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass
Inclusion 4
Classification: Xeric Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Channels cut into beach terraces
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Mazuma soil—IIe, irrigated; VIIc, nonirrigated
Range site: Mazuma soil—024XY002NV; Inclusion 1—024XY014NV; Inclusion 2—024XY003NV; Inclusion 3—027XY009NV; Inclusion 4—023XY038NV

542—Mazuma-Ragtown association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Mazuma silt loam, 0 to 4 percent slopes—55 percent
• Ragtown silty clay loam, 0 to 2 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Mazuma silt loam, 4 to 8 percent slopes—7 percent
• Inclusion 2: Isolde fine sand, 0 to 2 percent slopes—5 percent
• Inclusion 3: Playas—3 percent

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The higher lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic

Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Eroded lake plain terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush
Inclusion 2
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Black greasewood, Indian ricegrass
Inclusion 3
Position on landscape: Undrained basins on lake plain terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Mazuma and Ragtown soils—VIIs, nonirrigated
Range site: Mazuma soil—024XY003NV; Ragtown soil—027XY025NV; Inclusion 1—024XY003NV; Inclusion 2—027XY016NV; Inclusion 3—none

543—Mazuma-Swingler association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Mazuma fine sandy loam, 0 to 4 percent slopes—50 percent
• Swingler silt loam, 0 to 2 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Umberland silty clay, 0 to 2 percent slopes—5 percent
• Inclusion 2: Badland, 4 to 30 percent slopes—4 percent
• Inclusion 3: Mastly fine sandy loam, 0 to 4 percent slopes—3 percent
• Inclusion 4: Veta very gravelly loamy sand, 2 to 8 percent slopes—3 percent

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The higher lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,200 feet

Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Swingler Soil

Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Mixed alluvium over lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 6 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 6 to 19 inches
Texture: Loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 23 to 68

Depth: 19 to 60 inches
Texture: Silt loam, very fine sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 60 to 70 inches
Texture: Stratified silty clay loam and silty clay
Structure: Massive
Consistence: Hard, friable
Reaction: Very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 8.4 to 10.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High

Corrosivity: Steel—high; concrete—high
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: Depressions on lake plain terraces
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye
Inclusion 2
Position on landscape: Eroded lake plain terraces
Distinctive present vegetation: None
Inclusion 3
Classification: Durorthidic Xeric Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Stream terraces
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye
Inclusion 4
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Alluvial fans adjacent to lake plain terraces
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Swingler soil—IIIs, irrigated; Mazuma and Swingler soils—VIIs, nonirrigated
Range site: Mazuma soil—024XY003NV; Swingler soil—027XY025NV; Inclusion 1—024XY015NV; Inclusion 2—none; Inclusion 3—024XY006NV; Inclusion 4—023XY038NV

545—Mazuma-Davey association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Mazuma fine sandy loam, 2 to 8 percent slopes—40 percent
• Davey sandy loam, 2 to 8 percent slopes—25 percent
• Mazuma fine sandy loam, moderately saline, 2 to 4 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Mastly fine sandy loam, 0 to 4 percent slopes—7 percent
• Inclusion 2: Smaug silt loam, 2 to 8 percent slopes—5 percent
• Inclusion 3: Zorravista fine sand, 2 to 15 percent slopes—3 percent

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The middle or lower lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Davey Soil

Classification: Xerollic Camborthids, sandy, mixed, mesic

Position on landscape: The upper lake plain terraces
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 10 percent

Depth: 0 to 5 inches
Texture: Sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 14 inches
Texture: Fine sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 14 to 67 inches
Texture: Fine sand, loamy fine sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline or strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 3.9 to 6.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Moderately Saline Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces at the lower elevations
Parent material: Loamy lacustrine material
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight

Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Durorthidic Xeric Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Stream terraces cut into lake plain terraces
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye
Inclusion 2
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Interpretive Groups

Capability classification: Mazuma soil—IIIe, irrigated, VIIc, nonirrigated; Davey soil and the moderately saline Mazuma soil—VIIs, nonirrigated
Range site: Mazuma soil—024XY002NV; Davey soil—024XY020NV; the moderately saline Mazuma soil—024XY003NV; Inclusion 1—024XY006NV; Inclusion 2—024XY004NV; Inclusion 3—023XY011NV

546—Mazuma association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Mazuma very fine sandy loam, 0 to 2 percent slopes—55 percent
• Mazuma fine sandy loam, moderately saline, 0 to 4 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Trocken very gravelly loam, 4 to 15 percent slopes—7 percent
• Inclusion 2: Mazuma silt loam, 0 to 2 percent slopes—4 percent
• Inclusion 3: Veta very gravelly sandy loam, 2 to 8 percent slopes—3 percent
• Inclusion 4: Torrifluventic Haploxerolls gravelly loam, 2 to 8 percent slopes—1 percent

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces at the lower elevations
Parent material: Loamy lacustrine material
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Very fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Moderately Saline Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Loamy lacustrine material

Slope range: 0 to 4 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Beach terraces superimposed on lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Black greasewood, seepweed, shadscale

Inclusion 3
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Alluvial fans adjacent to lake plain terraces
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Inclusion 4
Classification: Torrifluventic Haploxerolls, sandy-skeletal, mixed, mesic
Position on landscape: Alluvial fans adjacent to lake plain terraces
Distinctive present vegetation: Basin big sagebrush, rubber rabbitbrush, basin wildrye

Interpretive Groups

Capability classification: Mazuma soil—IIc, irrigated, VIIc, nonirrigated; the moderately saline Mazuma soil—VIIs, irrigated
Range site: Mazuma soil—024XY002NV; the moderately saline Mazuma soil—024XY003NV; Inclusion 1—024XY002NV; Inclusion 2—027XY025NV; Inclusion 3—023XY038NV; Inclusion 4—026XY034NV

547—Mazuma fine sandy loam, moderately sodic, 0 to 4 percent slopes

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major component:
• Mazuma fine sandy loam, 0 to 4 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Dun Glen fine sandy loam, 0 to 4 percent slopes—5 percent
• Inclusion 2: Xeric Torrifluvents sandy loam, 0 to 4 percent slopes—4 percent
• Inclusion 3: Aquic Torriorthents silt loam, 0 to 2 percent slopes—4 percent
• Inclusion 4: Playas—2 percent

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Xeric Torrifluvents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Channels cut into lake plain terraces
Distinctive present vegetation: Basin big sagebrush, spiny hopsage, basin wildrye
Inclusion 3
Classification: Aquic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: The lower, concave lake plain terraces
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye
Inclusion 4
Position on landscape: Basin floors adjacent to the lowest lake plain terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Mazuma soil—VIIs, nonirrigated
Range site: Mazuma soil—024XY003NV; Inclusion 1—024XY002NV; Inclusion 2—024XY041NV; Inclusion 3—024XY015NV; Inclusion 4—none

548—Mazuma silt loam, 0 to 4 percent slopes

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major component:
• Mazuma silt loam, 0 to 4 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Badland, 4 to 30 percent slopes—6 percent
• Inclusion 2: Aeric Fluvaquents silt loam, 0 to 2 percent slopes—2 percent
• Inclusion 3: Typic Torriorthents fine sandy loam, 0 to 2 percent slopes—2 percent

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Loamy lacustrine material

Slope range: 0 to 4 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Eroded lake plain terraces
Distinctive present vegetation: None

Inclusion 2
Classification: Aeric Fluvaquents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Channels cut into lake plain terraces
Distinctive present vegetation: Inland saltgrass, Baltic rush, black greasewood

Inclusion 3
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Alluvial flats adjacent to lake plain terraces
Distinctive present vegetation: Black greasewood, inland saltgrass, basin wildrye

Interpretive Groups

Capability classification: Mazuma soil—VIIs, nonirrigated
Range site: Mazuma soil—027XY025NV; Inclusion 1—none; Inclusion 2—024XY044NV; Inclusion 3—024XY011NV

549—Mazuma-Smaug association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Mazuma fine sandy loam, 0 to 4 percent slopes—45 percent
• Smaug fine sandy loam, 0 to 4 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Juva fine sandy loam, 0 to 4 percent slopes—7 percent
• Inclusion 2: Hawsley loamy fine sand, 2 to 8 percent slopes—5 percent
• Inclusion 3: Xeric Torriorthents gravelly loamy fine sand, 0 to 2 percent slopes—3 percent

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The slightly higher lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 4,000 to 4,200 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Smaug Soil

Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: The slightly lower lake plain terraces
Parent material: Silty lacustrine material
Slope range: 0 to 4 percent
Elevation: 4,000 to 4,200 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Fine sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 10 to 60 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 8.3 to 9.5 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torrifluvents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Alluvial fans adjacent to lake plain terraces
Distinctive present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on lake plain terraces
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Inclusion 3
Classification: Xeric Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Stream terraces cut into lake plain terraces
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage

Interpretive Groups

Capability classification: Mazuma soil—IIe, irrigated; Mazuma soil—VIIc, Smaug soil—VIIs, nonirrigated

Range site: Mazuma soil—027XY018NV; Smaug soil—027XY018NV; Inclusion 1—027XY018NV; Inclusion 2—027XY009NV; Inclusion 3—027XY029NV

560—Toulon-Mazuma-Hawsley association

Map Unit Setting

Position on landscape: Lake plain terraces, beach terraces, and sand sheets

Composition

Major components:
- Toulon gravelly loam, 2 to 8 percent slopes—35 percent
- Mazuma loamy fine sand, 0 to 4 percent slopes—30 percent
- Hawsley loamy sand, 2 to 8 percent slopes—20 percent

Contrasting inclusions:
- Inclusion 1: Mazuma fine sandy loam, 2 to 8 percent slopes—8 percent
- Inclusion 2: Davey gravelly sandy loam, 4 to 15 percent slopes—4 percent
- Inclusion 3: Typic Camborthids very fine sandy loam, 4 to 15 percent slopes—2 percent
- Inclusion 4: Mastly fine sandy loam, 0 to 4 percent slopes—1 percent

Characteristics of the Toulon Soil

Classification: Typic Camborthids, sandy-skeletal, mixed, mesic
Position on landscape: The middle and upper beach terraces
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 20 percent

Depth: 0 to 4 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 4 to 15 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 15 to 60 inches
Texture: Extremely cobbly coarse sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 2.4 to 4.2 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—5; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Black greasewood, Nevada dalea, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Loamy fine sand
Structure: Single grained
Consistence: Loose
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Hawsley Soil

Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on the upper lake plain terraces
Parent material: Mixed alluvium and water-reworked eolian deposits
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 8 to 42 inches
Texture: Stratified fine sand and sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline or strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 42 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.6 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Xerollic Camborthids, sandy, mixed, mesic
Position on landscape: The upper lake plain terraces
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Inclusion 3
Classification: Typic Camborthids, coarse-silty, mixed mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 4
Classification: Durorthidic Xeric Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Stream terraces cut into lake plain terraces
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Interpretive Groups

Capability classification: Toulon soil—IVe, Mazuma soil—IIs, Hawsley soil—IVs, irrigated; Toulon, Mazuma, and Hawsley soils—VIIs, nonirrigated
Range site: Toulon soil—024XY002NV; Mazuma soil—027XY012NV; Hawsley soil—027XY009NV; Inclusion 1—024XY002NV; Inclusion 2—024XY020NV; Inclusion 3—024XY002NV; Inclusion 4—024XY006NV

561—Toulon-Trocken-Mazuma association

Map Unit Setting

Position on landscape: Beach terraces and lake plain terrace remnants

Composition

Major components:
• Toulon very cobbly loam, 4 to 8 percent slopes—45 percent
• Trocken gravelly sandy loam, 4 to 8 percent slopes—25 percent
• Mazuma fine sandy loam, 2 to 8 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents fine sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Hawsley fine sand, 4 to 15 percent slopes—5 percent
• Inclusion 3: Xerollic Camborthids gravelly loamy sand, 4 to 8 percent slopes—5 percent

Characteristics of the Toulon Soil

Classification: Typic Camborthids, sandy-skeletal, mixed, mesic
Position on landscape: Beach terraces adjacent to hills and pediment remnants
Parent material: Mixed alluvium
Slope range: 4 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Cobbles, 15 percent; pebbles, 20 percent

Depth: 0 to 4 inches
Texture: Very cobbly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 4 to 15 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 15 to 60 inches
Texture: Extremely cobbly coarse sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 2.4 to 4.2 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Undulating, slightly dissected lake plain terrace remnants
Parent material: Mixed alluvium
Slope range: 4 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 3.0 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Undulating lake plain terrace remnants
Parent material: Loamy lacustrine material
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The middle lake plain terraces
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand dunes superimposed on lake plain terraces
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Inclusion 3
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Channels
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Mazuma soil—IIIe, irrigated; Toulon and Trocken soils—VIIs, Mazuma soil—VIIe, nonirrigated
Range site: Toulon soil—024XY002NV; Trocken soil—024XY014NV; Mazuma soil—024XY002NV; Inclusion 1—024XY004NV; Inclusion 2—027XY009NV; Inclusion 3—023XY038NV

580—Verdico-Corral association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Verdico extremely stony sandy loam, 4 to 30 percent slopes—45 percent
• Corral extremely stony loam, 4 to 30 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—7 percent
• Inclusion 2: Xeric Torriorthents extremely stony loam, 15 to 50 percent slopes—4 percent
• Inclusion 3: Manogue very stony clay, 0 to 4 percent slopes—3 percent
• Inclusion 4: Typic Natrargids loam, 2 to 8 percent slopes—1 percent

Characteristics of the Verdico Soil

Classification: Xerollic Paleargids, fine, montmorillonitic, mesic
Position on landscape: Convex toe slopes of plateaus
Parent material: Residuum and colluvium derived from tuff
Slope range: 4 to 30 percent
Elevation: 4,200 to 4,600 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 15 percent; cobbles, 10 percent; pebbles, 10 percent

Depth: 0 to 2 inches
Texture: Extremely stony sandy loam
Structure: Platy
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 22 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, very firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 22 to 29 inches
Texture: Gravelly clay
Structure: Massive
Consistence: Very hard, very firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 29 to 60 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 3.0 to 6.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Corral Soil

Classification: Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Concave toe slopes of plateaus
Parent material: Residuum and colluvium derived from tuff
Slope range: 4 to 30 percent
Elevation: 4,200 to 4,600 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 25 percent; cobbles, 10 percent; pebbles, 5 percent

Depth: 0 to 4 inches
Texture: Extremely stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 12 inches
Texture: Loam

Structure: Angular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.8 to 3.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Rims of plateaus
Distinctive present vegetation: None
Inclusion 2
Classification: Xeric Torriorthents, loamy, mixed, nonacid, mesic, shallow
Position on landscape: Back slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 3
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Small summits of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 4
Classification: Typic Natrargids, fine, montmorillonitic, mesic
Position on landscape: Toe slopes of plateaus
Distinctive present vegetation: Black greasewood, seepweed, shadscale

Interpretive Groups

Capability classification: Verdico and Corral soils—VIIs, nonirrigated
Range site: Verdico soil—023XY047NV; Corral soil—023XY006NV; Inclusion 1—none; Inclusion 2—023XY047NV; Inclusion 3—023XY047NV; Inclusion 4—027XY025NV

581—Verdico-Chalco association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Verdico cobbly sandy loam, 8 to 30 percent slopes—45 percent
• Chalco very stony clay loam, 8 to 30 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—5 percent
• Inclusion 2: Old Camp very stony loam, 30 to 50 percent slopes—4 percent
• Inclusion 3: Xerollic Paleargids very stony fine sandy loam, 2 to 15 percent slopes—3 percent
• Inclusion 4: Tunnison very cobbly clay, 0 to 8 percent slopes—3 percent

Characteristics of the Verdico Soil

Classification: Xerollic Paleargids, fine, montmorillonitic, mesic
Position on landscape: Shoulders of plateaus
Parent material: Residuum and colluvium derived from tuff
Slope range: 8 to 30 percent
Elevation: 4,400 to 5,300 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 10 percent

Depth: 0 to 5 inches
Texture: Cobbly sandy loam
Structure: Platy
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 23 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, very firm
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 23 to 30 inches
Texture: Gravelly clay
Structure: Massive
Consistence: Very hard, very firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 30 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 3.0 to 6.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—5
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Chalco Soil

Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Shoulders of plateaus
Parent material: Residuum and colluvium derived from tuff
Slope range: 8 to 30 percent
Elevation: 4,400 to 5,300 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 8 percent; cobbles, 8 percent; pebbles, 35 percent

Depth: 0 to 1 inch
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 10 inches
Texture: Clay
Structure: Angular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 1.3 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Rims of plateaus
Distinctive present vegetation: None

Inclusion 2
Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-facing back slopes of plateaus
Distinctive present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Inclusion 3
Classification: Xerollic Paleargids, fine, montmorillonitic, mesic
Position on landscape: Concave summits and shoulders of plateaus
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Inclusion 4
Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability classification: Verdico and Chalco soils—VIIs, nonirrigated
Range site: Verdico soil—023XY037NV; Chalco soil—023XY037NV; Inclusion 1—none; Inclusion 2—026XY022NV; Inclusion 3—023XY037NV; Inclusion 4—023XY044NV

590—Buffaran stony loam, 2 to 15 percent slopes

Map Unit Setting

Position on landscape: Fan piedmont remnants

Composition

Major component:
• Buffaran stony loam, 2 to 15 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Fulstone very stony loam, 2 to 15 percent slopes—4 percent
• Inclusion 2: Corral stony loam, 8 to 30 percent slopes—4 percent
• Inclusion 3: Xeric Torriorthents stony loam, 8 to 30 percent slopes—4 percent
• Inclusion 4: Rock outcrop—3 percent

Characteristics of the Buffaran Soil

Classification: Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Summits of fan piedmont remnants
Parent material: Mixed alluvium
Slope range: 2 to 15 percent
Elevation: 4,400 to 5,800 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 2 inches
Texture: Stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 16 inches
Texture: Gravelly clay loam
Structure: Prismatic parting to angular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral or mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 to 27 inches
Texture: Indurated hardpan

Depth: 27 to 60 inches
Texture: Cemented hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.9 to 2.6 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Abruptic Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Summits of fan piedmont remnants
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Classification: Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Concave side slopes of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 3
Classification: Xeric Torriorthents, loamy, mixed, nonacid, mesic, shallow
Position on landscape: Convex side slopes of fan piedmont remnants
Distinctive present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Inclusion 4
Position on landscape: Side slopes of fan piedmont remnants
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Buffaran soil—VIIs, nonirrigated
Range site: Buffaran soil—023XY006NV; Inclusion 1—023XY047NV; Inclusion 2—023XY006NV; Inclusion 3—023XY030NV; Inclusion 4—none

591—Buffaran-Bombadil-Rock outcrop association

Map Unit Setting

Position on landscape: Fan piedmont remnants and old lake terraces partly superimposed on hills

Composition

Major components:
• Buffaran stony loam, 8 to 30 percent slopes—40 percent
• Bombadil very stony loam, 8 to 30 percent slopes—30 percent
• Rock outcrop—20 percent
Contrasting inclusions:
• Inclusion 1: Jaybee very cobbly loam, 4 to 30 percent slopes—9 percent
• Inclusion 2: Verdico very stony sandy loam, 8 to 30 percent slopes—1 percent

Characteristics of the Buffaran Soil

Classification: Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Fan piedmont remnants superimposed on old lake terraces adjacent to hills
Parent material: Mixed alluvium
Slope range: 8 to 30 percent
Elevation: 4,300 to 5,400 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 2 inches
Texture: Stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 16 inches
Texture: Gravelly clay loam
Structure: Prismatic parting to angular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral or mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 to 27 inches
Texture: Indurated hardpan

Depth: 27 to 60 inches
Texture: Cemented hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.9 to 2.6 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Bombadil Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Hills
Parent material: Residuum and colluvium derived from basic igneous rock
Slope range: 8 to 30 percent
Elevation: 4,300 to 5,400 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 6 inches
Texture: Loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 10 inches
Texture: Clay loam
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 20 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.1 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.32; T value—1; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Small peaks and rims of hills
Kind of rock: Basic igneous rock

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Convex summits and shoulders of hills
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 2
Classification: Xerollic Paleargids, fine, montmorillonitic, mesic
Position on landscape: Summits and shoulders of hills
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability classification: Buffaran and Bombadil soils—VIIs, irrigated; Rock outcrop—VIIIs
Range site: Buffaran soil—023XY006NV; Bombadil soil—023XY006NV; Rock outcrop—none; Inclusion 1—023XY047NV; Inclusion 2—023XY047NV

592—Buffaran-Corral association

Map Unit Setting

Position on landscape: Fan piedmont remnants superimposed on old lake terraces

Composition

Major components:
• Buffaran stony loam, 4 to 30 percent slopes—50 percent
• Corral very stony sandy loam, 4 to 15 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Bombadil very stony fine sandy loam, 2 to 4 percent slopes—6 percent
• Inclusion 2: Verdico very stony sandy loam, 2 to 8 percent slopes—4 percent
• Inclusion 3: Mazuma fine sandy loam, 2 to 8 percent slopes—3 percent
• Inclusion 4: Rock outcrop—2 percent

Characteristics of the Buffaran Soil

Classification: Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Summits and shoulders of fan piedmont remnants superimposed on old lake terraces
Parent material: Mixed alluvium
Slope range: 4 to 30 percent
Elevation: 4,300 to 5,000 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 2 inches
Texture: Stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 16 inches
Texture: Gravelly clay loam
Structure: Prismatic parting to angular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral or mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 to 27 inches
Texture: Indurated hardpan

Depth: 27 to 60 inches
Texture: Cemented hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.9 to 2.6 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Corral Soil

Classification: Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Concave side slopes of old lake terraces
Parent material: Residuum and colluvium derived from tuff
Slope range: 4 to 15 percent
Elevation: 4,300 to 5,000 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 12 inches
Texture: Loam
Structure: Angular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.8 to 3.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Small summits of plateau remnants
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 2
Classification: Xerollic Paleargids, fine, montmorillonitic, mesic
Position on landscape: Summits and toe slopes of lake terraces

Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 3

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces at the lower elevations
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 4

Position on landscape: Side slopes of fan piedmont remnants
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Buffaran and Corral soils—VIIs, nonirrigated
Range site: Buffaran soil—023XY006NV; Corral soil—023XY006NV; Inclusion 1—023XY006NV; Inclusion 2—023XY047NV; Inclusion 3—024XY002NV; Inclusion 4—none

610—Haybourne-Mottsville-Incy association

Map Unit Setting

Position on landscape: Fan piedmont remnants, fan collars, fan aprons, and sand dunes

Composition

Major components:
• Haybourne loamy sand, 0 to 8 percent slopes—40 percent
• Mottsville loamy coarse sand, 4 to 8 percent slopes—35 percent
• Incy sand, 4 to 30 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Torripsammentic Haploxerolls very stony loamy coarse sand, 8 to 15 percent slopes—5 percent
• Inclusion 2: Leviathan very stony sandy loam, 4 to 15 percent slopes—4 percent
• Inclusion 3: Springmeyer sandy loam, 2 to 8 percent slopes—1 percent

Characteristics of the Haybourne Soil

Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Summits of fan piedmont remnants
Parent material: Granitic alluvium
Slope range: 0 to 8 percent
Elevation: 4,100 to 4,800 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, needleandthread

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Depth: 0 to 6 inches
Texture: Loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 27 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 27 to 60 inches
Texture: Stratified sandy loam and loamy sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 4.8 to 7.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Mottsville Soil

Classification: Torripsammentic Haploxerolls, sandy, mixed, mesic
Position on landscape: Fan collars and fan aprons
Parent material: Granitic alluvium
Slope range: 4 to 8 percent
Elevation: 4,100 to 4,800 feet
Dominant present vegetation: Mountain big sagebrush,

antelope bitterbrush, needleandthread, Indian ricegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 90 days

Typical Profile

Depth: 0 to 15 inches
Texture: Loamy coarse sand
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 to 60 inches
Texture: Loamy sand
Structure: Subangular blocky or massive
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Very rapid
Available water capacity: 3.6 to 4.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Slow
Hydrologic group: A
Erosion factors (surface layer): K value—.10: T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—moderate
Potential for frost action: Low

Characteristics of the Incy Soil

Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Sand dunes
Parent material: Sandy eolian material derived from mixed rocks
Slope range: 4 to 30 percent
Elevation: 4,100 to 4,800 feet
Dominant present vegetation: Anderson peachbrush, antelope bitterbrush, needleandthread

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 90 days

Typical Profile

Depth: 0 to 4 inches
Texture: Sand
Structure: Single grained
Consistence: Loose
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.0 to 4.2 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.10: T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Torripsammentic Haploxerolls, sandy-skeletal, mixed, mesic
Position on landscape: Fan collars
Distinctive present vegetation: Mountain big sagebrush, antelope bitterbrush, needleandthread, Indian ricegrass

Inclusion 2
Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: The upper fan piedmont remnants
Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 3
Classification: Aridic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: Fan skirts adjacent to fan piedmont remnants

Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Interpretive Groups

Capability classification: Haybourne soil—IIIe, Mottsville soil—IVs, irrigated; Haybourne, Mottsville, and Incy soils—VIIs, nonirrigated
Range site: Haybourne soil—026XY020NV; Mottsville soil—026XY008NV; Incy soil—026XY014NV; Inclusion 1—026XY008NV; Inclusion 2—023XY020NV; Inclusion 3—023XY020NV

611—Haybourne-Zorravista-Fulstone association

Map Unit Setting

Position on landscape: Fan piedmonts and sand dunes

Composition

Major components:
• Haybourne sandy loam, 2 to 8 percent slopes—45 percent
• Zorravista fine sand, 4 to 15 percent slopes—25 percent
• Fulstone very stony loam, 2 to 8 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Xerollic Natrargids loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Xeric Torriorthents gravelly sandy loam, 0 to 2 percent slopes—4 percent
• Inclusion 3: Aquic Torrifluvents silt loam, 0 to 2 percent slopes—4 percent
• Inclusion 4: Smaug very fine sandy loam, 2 to 8 percent slopes—2 percent

Characteristics of the Haybourne Soil

Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Inset fans
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 4,200 to 5,200 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Pebbles, 15 percent

Depth: 0 to 6 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 25 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 25 to 60 inches
Texture: Stratified sandy loam and loamy sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 4.8 to 7.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Zorravista Soil

Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Sand dunes
Parent material: Sandy eolian material derived from mixed rocks
Slope range: 4 to 15 percent
Elevation: 4,200 to 5,200 feet
Dominant present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 4 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Mildly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.0 to 4.2 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.17; T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Fulstone Soil

Classification: Abruptic Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Summits of fan piedmont remnants
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 4,200 to 5,200 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 5 inches
Texture: Very stony loam
Structure: Platy parting to granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 17 inches
Texture: Clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 to 40 inches
Texture: Indurated hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Natrargids, fine, montmorillonitic, mesic
Position on landscape: Fan piedmont remnants
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 2
Classification: Xeric Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The lower inset fans
Distinctive present vegetation: Wyoming big sagebrush, basin wildrye, arrowleaf balsamroot

Inclusion 3
Classification: Aquic Torrifluvents, fine-silty, mixed (calcareous), mesic
Position on landscape: Alluvial flats
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Inclusion 4
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces

Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Haybourne soil—IIIe, irrigated; Haybourne soil—VIc, Zorravista and Fulstone soils—VIIs, nonirrigated
Range site: Haybourne soil—023XY006NV; Zorravista soil—023XY011NV; Fulstone soil—023XY047NV; Inclusion 1—023XY047NV; Inclusion 2—023XY040NV; Inclusion 3—023XY005NV; Inclusion 4—024XY004NV

614—Haybourne loamy sand, 4 to 15 percent slopes

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major component:
• Haybourne loamy sand, 4 to 15 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Xerollic Durargids stony loam, 4 to 30 percent slopes—9 percent
• Inclusion 2: Mazuma fine sandy loam, 4 to 8 percent slopes—5 percent
• Inclusion 3: Xerollic Camborthids gravelly sandy loam, 0 to 15 percent slopes—1 percent

Characteristics of the Haybourne Soil

Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Lake plain terraces
Parent material: Mixed alluvium
Slope range: 4 to 15 percent
Elevation: 4,200 to 4,500 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, needleandthread

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Depth: 0 to 6 inches
Texture: Loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 25 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 25 to 60 inches
Texture: Stratified sandy loam and loamy sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 4.8 to 7.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Durargids, coarse-loamy, mixed, mesic
Position on landscape: The upper lake plain terraces
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 2
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: The middle lake plain terraces
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Haybourne soil—VIIs, nonirrigated

Range site: Haybourne soil—026XY020NV; Inclusion 1—023XY006NV; Inclusion 2—024XY002NV; Inclusion 3—023XY038NV

615—Haybourne-Dun Glen association

Map Unit Setting

Position on landscape: Alluvial fans, fan skirts, and lake plain terrace remnants

Composition

Major components:
• Haybourne sandy loam, 2 to 8 percent slopes—55 percent
• Dun Glen fine sandy loam, 2 to 4 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Xeric Torriorthents very stony loamy sand, 2 to 8 percent slopes—2 percent
• Inclusion 2: Ceejay very cobbly loam, 8 to 30 percent slopes—2 percent
• Inclusion 3: Fluvaquents gravelly sandy loam, 2 to 8 percent slopes—1 percent

Characteristics of the Haybourne Soil

Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Alluvial fans and fan skirts
Parent material: Granitic alluvium
Slope range: 2 to 8 percent
Elevation: 4,100 to 4,500 feet
Dominant present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Pebbles, 15 percent

Depth: 0 to 6 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 25 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 25 to 60 inches
Texture: Stratified sandy loam and loamy sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 4.8 to 7.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Dun Glen Soil

Classification: Typic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: The lower fan skirts and lake plain terrace remnants
Parent material: Loess and volcanic ash over mixed alluvium
Slope range: 2 to 4 percent
Elevation: 4,100 to 4,300 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 3 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 10 inches
Texture: Very fine sandy loam
Structure: Subangular blocky

Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 10 to 60 inches
Texture: Fine sandy loam, very fine sandy loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Strongly alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 6.8 to 8.0 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xeric Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Inset fans
Distinctive present vegetation: Wyoming big sagebrush, basin wildrye, arrowleaf balsamroot
Inclusion 2
Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Low hills adjacent to the higher alluvial fans
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 3
Classification: Fluvaquents
Position on landscape: Stream channels cut into alluvial fans and lake plain terrace remnants
Distinctive present vegetation: Willow, cottonwood, basin big sagebrush

Interpretive Groups

Capability classification: Haybourne soil—IIIe, Dun Glen soil—IIe, irrigated; Haybourne soil—VIc, Dun Glen soil—VIIc, nonirrigated
Range site: Haybourne soil—023XY006NV; Dun Glen soil—024XY002NV; Inclusion 1—023XY040NV; Inclusion 2—023XY047NV; Inclusion 3—023XY034NV

616—Haybourne sandy loam, 2 to 8 percent slopes

Map Unit Setting

Position on landscape: Alluvial fans

Composition

Major component:
• Haybourne sandy loam, 2 to 8 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Veta gravelly loamy sand, 2 to 4 percent slopes—5 percent
• Inclusion 2: Xeric Torriorthents gravelly loamy sand, 2 to 8 percent slopes—5 percent
• Inclusion 3: Xerollic Camborthids gravelly sandy loam, 2 to 8 percent slopes—3 percent
• Inclusion 4: Chalco gravelly loam, 4 to 30 percent slopes—2 percent

Characteristics of the Haybourne Soil

Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Alluvial fans
Parent material: Granitic alluvium
Slope range: 2 to 8 percent
Elevation: 4,300 to 4,600 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Pebbles, 15 percent

Depth: 0 to 6 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 25 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 25 to 60 inches
Texture: Stratified sandy loam and loamy sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 4.8 to 7.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Fan aprons and fan collars adjacent to alluvial fans
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 2
Classification: Xeric Torriorthents, sandy, mixed, mesic
Position on landscape: Fan aprons and beach bars
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, needleandthread
Inclusion 3
Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: The lower lake plain terraces adjacent to alluvial fans
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 4
Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Side slopes of pediments adjacent to alluvial fans
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability subclass: Haybourne soil—IIIe, irrigated, VIc, nonirrigated
Range site: Haybourne soil—023XY038NV; Inclusion 1—023XY038NV; Inclusion 2—026XY020NV; Inclusion 3—023XY038NV; Inclusion 4—023XY047NV

620—Leviathan-Barnard association

Map Unit Setting

Position on landscape: Fan piedmont remnants

Composition

Major components:
• Leviathan very stony sandy loam, 4 to 15 percent slopes—55 percent
• Barnard very stony sandy clay loam, 4 to 8 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Springmeyer very stony sandy loam, 8 to 15 percent slopes—7 percent
• Inclusion 2: Mottsville sand, 4 to 8 percent slopes—3 percent

Characteristics of the Leviathan Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Summits of fan piedmont remnants
Parent material: Mixed alluvium derived dominantly from granite
Slope range: 4 to 15 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 15 percent

Depth: 0 to 8 inches
Texture: Very stony sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Slightly acid
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 60 inches
Texture: Very gravelly sandy clay loam
Structure: Subangular blocky or massive
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 4.3 to 5.5 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.17; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Barnard Soil

Classification: Aridic Durixerolls, fine, montmorillonitic, mesic
Position on landscape: Summits of fan piedmont remnants at the higher elevations
Parent material: Mixed alluvium
Slope range: 4 to 8 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 15 inches
Texture: Very stony sandy clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 to 26 inches
Texture: Clay
Structure: Subangular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 26 inches
Texture: Indurated hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 3.4 to 6.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: Fan aprons and inset fans
Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 2
Classification: Torripsammentic Haploxerolls, sandy, mixed, mesic
Position on landscape: Fan aprons
Distinctive present vegetation: Mountain big sagebrush, antelope bitterbrush, needleandthread, Indian ricegrass

Interpretive Groups

Capability classification: Leviathan and Barnard soils—VIIs, nonirrigated
Range site: Leviathan soil—023XY020NV; Barnard soil—023XY020NV; Inclusion 1—023XY020NV; Inclusion 2—026XY008NV

621—Leviathan-Springmeyer-Haybourne association

Map Unit Setting

Position on landscape: Fan piedmonts

Composition

Major components:
• Leviathan very stony sandy loam, 4 to 15 percent slopes—40 percent
• Springmeyer very stony sandy loam, 2 to 8 percent slopes—30 percent
• Haybourne loamy sand, 4 to 8 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Cumulic Haploxerolls stony loam, 2 to 4 percent slopes—8 percent
• Inclusion 2: Barnard very stony loam, 4 to 8 percent slopes—4 percent
• Inclusion 3: Aridic Argixerolls loam, 15 to 30 percent slopes—2 percent
• Inclusion 4: Cumulic Haplaquolls loam, 0 to 2 percent slopes—1 percent

Characteristics of the Leviathan Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Summits of fan piedmont remnants
Parent material: Mixed alluvium derived dominantly from granite
Slope range: 4 to 15 percent
Elevation: 4,400 to 5,600 feet
Dominant present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 15 percent

Depth: 0 to 11 inches
Texture: Very stony sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Slightly acid
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 11 to 60 inches
Texture: Very gravelly sandy clay loam
Structure: Subangular blocky or massive
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 4.3 to 5.5 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.17; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Springmeyer Soil

Classification: Aridic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: Inset fans
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 4,400 to 5,600 feet
Dominant present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 15 percent; cobbles, 5 percent; pebbles, 5 percent

Depth: 0 to 7 inches
Texture: Very stony sandy loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 7 to 34 inches
Texture: Sandy clay loam
Structure: Prismatic, subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 to 60 inches
Texture: Gravelly sandy clay loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 6.3 to 8.0 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.17; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Haybourne Soil

Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Fan aprons
Parent material: Mixed alluvium
Slope range: 4 to 8 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, needleandthread

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Depth: 0 to 6 inches
Texture: Loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 25 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 25 to 60 inches
Texture: Stratified sandy loam and loamy sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 4.8 to 7.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Cumulic Haploxerolls, fine-loamy, mixed, mesic
Position on landscape: Stream terraces cut into fan piedmont remnants
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Inclusion 2
Classification: Aridic Durixerolls, fine, montmorillonitic, mesic
Position on landscape: The highest fan piedmont remnants
Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 3
Classification: Aridic Argixerolls, loamy, mixed, mesic, shallow
Position on landscape: Hills adjacent to fan piedmont remnants
Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 4
Classification: Cumulic Haplaquolls, fine-loamy, mixed, mesic
Position on landscape: Stream terraces cut into fan piedmont remnants adjacent to seeps
Distinctive present vegetation: Nevada bluegrass, meadow barley

Interpretive Groups

Capability classification: Haybourne soil—IIIe, irrigated; Leviathan, Springmeyer, and Haybourne soils—VIIs, nonirrigated

Range site: Leviathan soil—023XY020NV; Springmeyer soil—023XY020NV; Haybourne soil—026XY020NV; Inclusion 1—023XY009NV; Inclusion 2—023XY020NV; Inclusion 3—023XY020NV; Inclusion 4—026XY003NV

622—Leviathan very gravelly loam, 2 to 8 percent slopes

Map Unit Setting

Position on landscape: Alluvial fans

Composition

Major component:
• Leviathan very gravelly loam, 2 to 8 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Xeric Torriorthents stony sandy loam, 2 to 4 percent slopes—5 percent
• Inclusion 2: Abruptic Aridic Argixerolls very gravelly sandy loam, 2 to 8 percent slopes—5 percent

Characteristics of the Leviathan Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Alluvial fans
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 4,600 to 5,600 feet
Dominant present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 30 percent

Depth: 0 to 8 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 60 inches
Texture: Very gravelly sandy clay loam
Structure: Subangular blocky or massive
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 4.3 to 5.5 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: Channels cut into alluvial fans
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage
Inclusion 2
Classification: Abruptic Aridic Argixerolls, clayey, montmorillonitic, mesic, shallow
Position on landscape: Summits of alluvial fan remnants
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Interpretive Groups

Capability classification: Leviathan soil—IVs, irrigated, VIIs, nonirrigated
Range site: Leviathan soil—023XY020NV; Inclusion 1—027XY029NV; Inclusion 2—023XY037NV

630—Chappuis sandy loam

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major component:
• Chappuis sandy loam, 0 to 2 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Typic Natrargids loam, 0 to 2 percent slopes—5 percent
• Inclusion 2: Chappuis silty clay loam, 0 to 2 percent slopes—5 percent

Characteristics of the Chappuis Soil

Classification: Xerollic Natrargids, fine, montmorillonitic, mesic

Position on landscape: Lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,980 to 4,050 feet
Dominant present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 3 inches
Texture: Sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 3 to 15 inches
Texture: Silty clay
Structure: Prismatic parting to angular blocky
Consistence: Hard, very friable
Reaction: Moderately alkaline or strongly alkaline
Salinity: 2 to 8 mmhos per cm
Sodicity: SAR 20 to 50

Depth: 15 to 45 inches
Texture: Silty clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline or strongly alkaline
Salinity: 2 to 8 mmhos per cm
Sodicity: SAR more than 50

Depth: 45 to 60 inches
Texture: Silt loam
Structure: Angular blocky
Consistence: Hard, very firm
Reaction: Moderately alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 50

Soil and Water Features

Depth to a seasonal high water table: 48 to 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 4.5 to 5.5 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.37; T value—1; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Natrargids, fine-loamy, mixed, mesic
Position on landscape: The lowest lake plain terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush
Inclusion 2
Classification: Xerollic Natrargids, fine, montmorillonitic, mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Interpretive Groups

Capability classification: Chappuis soil—VIIs, nonirrigated
Range site: Chappuis soil—024XY006NV; Inclusion 1—024XY003NV; Inclusion 2—024XY006NV

702—Graufels-Glenbrook association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Graufels bouldery sand, 15 to 50 percent slopes—50 percent
• Glenbrook very stony loamy coarse sand, 15 to 50 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—5 percent
• Inclusion 2: Sumine very stony loam, 15 to 50 percent slopes—5 percent
• Inclusion 3: Entic Haploxerolls very bouldery loamy coarse sand, 30 to 75 percent slopes—5 percent

Characteristics of the Graufels Soil

Classification: Torripsammentic Haploxerolls, sandy, mixed, mesic
Position on landscape: North- and east-facing side slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 15 to 50 percent
Elevation: 5,400 to 6,800 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 90 days

Typical Profile

Surface cover: Stones and boulders, 1 percent; pebbles, 15 percent

Depth: 0 to 11 inches
Texture: Bouldery sand
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 11 to 35 inches
Texture: Gravelly loamy coarse sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 35 to 60 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Rapid
Available water capacity: 1.5 to 3.0 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.10: T value—2; wind erodibility group—4
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Glenbrook Soil

Classification: Xeric Torripsamments, mixed, mesic, shallow
Position on landscape: South- and west-facing side slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 15 to 50 percent
Elevation: 5,400 to 6,800 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 5 percent; pebbles, 15 percent

Depth: 0 to 8 inches
Texture: Very stony loamy coarse sand
Structure: Single grained
Consistence: Loose
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 19 inches
Texture: Gravelly loamy coarse sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 19 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Rapid
Available water capacity: 0.6 to 1.2 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10: T value—1; wind erodibility group—4
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None
Inclusion 2
Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing side slopes of mountains, adjacent to volcanic rock outcrop

Distinctive present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Inclusion 3

Classification: Entic Haploxerolls, sandy, mixed, frigid
Position on landscape: Concave north-facing back slopes of mountains at the higher elevations
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Interpretive Groups

Capability classification: Graufels and Glenbrook soils—VIIs, nonirrigated
Range site: Graufels soil—023XY039NV; Glenbrook soil—023XY039NV; Inclusion 1—none; Inclusion 2—023XY016NV; Inclusion 3—023XY041NV

710—Thulepah-Hutchley association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Thulepah very stony loam, 8 to 30 percent slopes—45 percent
• Hutchley very cobbly sandy loam, 4 to 30 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Newlands very stony loam, 30 to 50 percent slopes—6 percent
• Inclusion 2: Rock outcrop—3 percent
• Inclusion 3: Argic Cryoborolls loam, 4 to 15 percent slopes—3 percent
• Inclusion 4: Aridic Argixerolls very gravelly loam, 4 to 15 percent slopes—3 percent

Characteristics of the Thulepah Soil

Classification: Argic Pachic Cryoborolls, fine-loamy, mixed
Position on landscape: Side slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 8 to 30 percent
Elevation: 7,000 to 8,000 feet
Dominant present vegetation: Mountain big sagebrush, snowberry, mountain brome

Climatic Data

Average annual precipitation: About 16 inches
Average annual air temperature: About 41 degrees F
Frost-free period: About 50 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 16 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 to 42 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 42 to 60 inches
Texture: Gravelly clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 8.7 to 10.4 inches
Water-supplying capacity: 15 to 17 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—moderate
Potential for frost action: Moderate

Characteristics of the Hutchley Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Crests of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 4 to 30 percent
Elevation: 7,000 to 8,000 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 16 inches
Average annual air temperature: About 42 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Cobbles, 25 percent; pebbles, 20 percent

Depth: 0 to 6 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 14 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Agric Cryoborolls, fine-loamy, mixed
Position on landscape: Concave, north-facing back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass, basin wildrye

Inclusion 2
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None

Inclusion 3
Classification: Argic Cryoborolls, fine-loamy, mixed
Position on landscape: Concave side slopes of mountains
Distinctive present vegetation: Quaking aspen, snowberry, mountain brome

Inclusion 4
Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Concave crests and shoulders of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bluebunch wheatgrass, Idaho fescue

Interpretive Groups

Capability classification: Thulepah and Hutchley soils—VIIs, nonirrigated
Range site: Thulepah soil—023XY019NV; Hutchley soil—023XY008NV; Inclusion 1—023XY007NV; Inclusion 2—none; Inclusion 3—023XY028NV; Inclusion 4—023XY017NV

711—Thulepah-Hutchley-Rock outcrop association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Thulepah very stony loam, 50 to 75 percent slopes—40 percent
• Hutchley very gravelly loam, 8 to 30 percent slopes—25 percent
• Rock outcrop—20 percent
Contrasting inclusions:
• Inclusion 1: Sumine very stony loam, 30 to 75 percent slopes—5 percent
• Inclusion 2: Terca very stony loam, 30 to 75 percent slopes—5 percent
• Inclusion 3: Aridic Argixerolls very stony loam, 15 to 30 percent slopes—4 percent
• Inclusion 4: Argic Cryoborolls loam, 4 to 8 percent slopes—1 percent

Characteristics of the Thulepah Soil

Classification: Argic Pachic Cryoborolls, fine-loamy, mixed
Position on landscape: North-facing back slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 50 to 75 percent
Elevation: 5,400 to 7,200 feet
Dominant present vegetation: Idaho fescue, mountain big sagebrush

Climatic Data

Average annual precipitation: About 16 inches

Average annual air temperature: About 41 degrees F
Frost-free period: About 50 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 28 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 28 to 60 inches
Texture: Gravelly clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 8.7 to 10.4 inches
Water-supplying capacity: 15 to 17 inches
Runoff: Very rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—moderate
Potential for frost action: Moderate

Characteristics of the Hutchley Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Crests of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 8 to 30 percent
Elevation: 5,400 to 7,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 16 inches
Average annual air temperature: About 42 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 6 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 15 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10: T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Peaks and ridges of mountains
Kind of rock: Andesite or basalt

Contrasting Inclusions

Inclusion 1

Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: South-facing back slopes of mountains

Distinctive present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Inclusion 2

Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: The lower, south-facing back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 3

Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Shoulders of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bluebunch wheatgrass, Idaho fescue

Inclusion 4

Classification: Argic Cryoborolls, fine-loamy, mixed
Position on landscape: Concave side slopes of mountains
Distinctive present vegetation: Quaking aspen, snowberry, mountain brome

Interpretive Groups

Capability classification: Thulepah and Hutchley soils—VIIs, nonirrigated; Rock outcrop—VIIs
Range site: Thulepah soil—023XY054NV; Hutchley soil—023XY008NV; Rock outcrop—none; Inclusion 1—023XY016NV; Inclusion 2—023XY039NV; Inclusion 3—023XY017NV; Inclusion 4—023XY028NV

721—Softscrabble-Sumine-Hutchley association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Softscrabble very stony loam, 15 to 50 percent slopes—40 percent
• Sumine very stony loam, 15 to 50 percent slopes—30 percent
• Hutchley very cobbly sandy loam, 4 to 30 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—6 percent
• Inclusion 2: Aridic Argixerolls very cobbly sandy loam, 4 to 30 percent slopes—4 percent
• Inclusion 3: Thulepah very stony loam, 8 to 15 percent slopes—3 percent
• Inclusion 4: Bucklake very stony loam, 15 to 30 percent slopes—2 percent

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North- and east-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 15 to 50 percent
Elevation: 6,000 to 8,000 feet
Dominant present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 14 to 16 inches

Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Sumine Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: South- and west-facing back slopes of mountains
Parent material: Residuum and colluvium derived from welded tuff, andesite, or basalt
Slope range: 15 to 50 percent
Elevation: 6,000 to 8,000 feet
Dominant present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 10 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 28 inches
Texture: Very gravelly loam, very cobbly clay loam
Structure: Angular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 28 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 2.3 to 4.6 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Hutchley Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Crests and shoulders of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 4 to 30 percent
Elevation: 6,000 to 8,000 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 70 days

Typical Profile

Surface cover: Cobbles, 25 percent; pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 14 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D

Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None
Inclusion 2
Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Slightly concave or smooth crests and shoulders of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bluebunch wheatgrass, Idaho fescue
Inclusion 3
Classification: Argic Pachic Cryoborolls, fine-loamy, mixed
Position on landscape: North-facing side slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, snowberry, mountain brome
Inclusion 4
Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: The lower, south-facing side slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Interpretive Groups

Capability classification: Softscrabble, Sumine, and Hutchley soils—VIIs, nonirrigated
Range site: Softscrabble soil—023XY007NV; Sumine soil—023XY016NV; Hutchley soil—023XY008NV; Inclusion 1—none; Inclusion 2—023XY017NV; Inclusion 3—023XY019NV; Inclusion 4—023XY039NV

722—Softscrabble-Bucklake-Indiano association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Softscrabble very stony loam, 15 to 50 percent slopes—40 percent
• Bucklake extremely stony loam, 30 to 50 percent slopes—30 percent
• Indiano very stony loam, 8 to 30 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Devada very stony loam, 15 to 30 percent slopes—8 percent
• Inclusion 2: Rock outcrop—5 percent
• Inclusion 3: Cumulic Haplaquolls loam, 2 to 8 percent slopes—2 percent

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing, concave back slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 15 to 50 percent
Elevation: 5,600 to 6,800 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South- and west-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 5,600 to 6,800 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 17 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Indiano Soil

Classification: Aridic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: The lower, north-facing shoulders and back slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 8 to 30 percent
Elevation: 5,600 to 6,500 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 5 percent; pebbles, 15 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Slightly acid
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 13 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 to 33 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 33 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 2.7 to 5.5 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: North-facing, convex shoulders of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 2
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None
Inclusion 3
Classification: Cumulic Haplaquolls, fine-loamy, mixed, mesic
Position on landscape: Stream terraces and seeps adjacent to toe slopes of mountains
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Interpretive Groups

Capability classification: Softscrabble, Bucklake, and Indiano soils—VIIs, nonirrigated
Range site: Softscrabble soil—023XY041NV; Bucklake soil—023XY039NV; Indiano soil—023XY039NV; Inclusion 1—023XY031NV; Inclusion 2—none; Inclusion 3—023XY009NV

723—Softscrabble-Hutchley-Thulepah association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Softscrabble very stony loam, 15 to 50 percent slopes—50 percent
• Hutchley very gravelly loam, 4 to 15 percent slopes—20 percent
• Thulepah very stony loam, 8 to 30 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Prunie very stony loam, 4 to 15 percent slopes—9 percent
• Inclusion 2: Terca very cobbly loam, 30 to 50 percent slopes—2 percent
• Inclusion 3: Rock outcrop—2 percent
• Inclusion 4: Aquic Cryoborolls stony loam, 2 to 8 percent slopes—2 percent

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Side slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 15 to 50 percent
Elevation: 7,000 to 8,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable

Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Hutchley Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Crests and shoulders of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 4 to 15 percent
Elevation: 7,000 to 8,000 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 42 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 6 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 15 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Thulepah Soil

Classification: Argic Pachic Cryoborolls, fine-loamy, mixed
Position on landscape: North-facing side slopes of mountains
Parent material: Residuum and colluvium derived from andesite or basalt
Slope range: 8 to 30 percent
Elevation: 7,000 to 8,000 feet
Dominant present vegetation: Mountain big sagebrush, snowberry, mountain brome

Climatic Data

Average annual precipitation: About 16 inches
Average annual air temperature: About 41 degrees F
Frost-free period: About 50 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 28 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 28 to 60 inches
Texture: Gravelly clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 8.7 to 10.4 inches
Water-supplying capacity: 15 to 17 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—moderate
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, fine, montmorillonitic, frigid
Position on landscape: Slightly convex shoulders and concave toe slopes of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bluebunch wheatgrass, Idaho fescue
Inclusion 2
Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: The lower, south-facing back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 3
Position on landscape: Mountains
Distinctive present vegetation: None
Inclusion 4
Classification: Aquic Cryoborolls, fine, montmorillonitic
Position on landscape: Intermountain valleys
Distinctive present vegetation: Nevada bluegrass, meadow barley

Interpretive Groups

Capability classification: Softscrabble, Hutchley, and Thulepah soils—VIIs, nonirrigated
Range site: Softscrabble soil—023XY041NV; Hutchley soil—023XY008NV; Thulepah soil—023XY019NV; Inclusion 1—023XY017NV; Inclusion 2—023XY039NV; Inclusion 3—none; Inclusion 4—026XY003NV

725—Softscrabble-Sumine-Prunie association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Softscrabble very stony loam, 15 to 50 percent slopes—35 percent
• Sumine very stony loam, 15 to 50 percent slopes—30 percent
• Prunie very stony loam, 4 to 15 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—7 percent
• Inclusion 2: Hutchley very gravelly loam, 4 to 15 percent slopes—5 percent
• Inclusion 3: Argiaquic Cryoborolls stony loam, 2 to 15 percent slopes—3 percent

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 15 to 50 percent
Elevation: 6,000 to 7,700 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 14 inches

Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Sumine Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: South-facing side slopes of plateaus
Parent material: Residuum and colluvium derived from welded tuff, andesite, or basalt
Slope range: 15 to 50 percent
Elevation: 6,000 to 7,700 feet
Dominant present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 10 percent

Depth: 0 to 5 inches
Texture: Very stony loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 21 inches
Texture: Very gravelly loam, very cobbly clay loam
Structure: Angular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 21 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 2.3 to 4.6 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Prunie Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, frigid
Position on landscape: Concave side slopes of plateaus
Parent material: Residuum derived from basalt or andesite

Slope range: 4 to 15 percent
Elevation: 6,000 to 7,700 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, bluebunch wheatgrass, Idaho fescue

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 70 days

Typical Profile

Surface cover: Stones and boulders, 15 percent

Depth: 0 to 10 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 31 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 31 to 45 inches
Texture: Clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 45 to 52 inches
Texture: Weathered bedrock

Depth: 52 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 5.1 to 7.7 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.32; T value—3; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Rims and side slopes of plateaus
Distinctive present vegetation: None
Inclusion 2
Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Convex crests of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 3
Classification: Argiaquic Cryoborolls, fine, montmorillonitic
Position on landscape: Bottoms of interplateau basins
Distinctive present vegetation: Nevada bluegrass, meadow barley

Interpretive Groups

Capability classification: Softscrabble, Sumine, and Prunie soils—VIIs, nonirrigated
Range site: Softscrabble soil—023XY041NV; Sumine soil—023XY016NV; Prunie soil—023XY017NV; Inclusion 1—none; Inclusion 2—023XY008NV; Inclusion 3—026XY003NV

726—Softscrabble-Dosie-Devada association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Softscrabble very stony loam, 15 to 50 percent slopes—40 percent
• Dosie extremely stony loam, 15 to 50 percent slopes—30 percent
• Devada very stony loam, 4 to 15 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Lithic Xerollic Haplargids very stony loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Rubble land—5 percent
• Inclusion 3: Lithic Xerollic Camborthids extremely stony clay, 2 to 4 percent slopes—3 percent
• Inclusion 4: Cumulic Haplaquolls loam, 0 to 4 percent slopes—2 percent

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing side slopes of plateaus

Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Dosie Soil

Classification: Pachic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: South-facing side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 30 percent; cobbles, 15 percent; pebbles, 10 percent

Depth: 0 to 5 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 41 inches
Texture: Very gravelly clay loam, very gravelly clay
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 41 inches
Texture: Unweathered bedrock
Depth to a seasonal high water table: More than 60 inches

Soil and Water Features

Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 4.0 to 5.4 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.10; T value—3; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight

Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 15 percent
Elevation: 5,400 to 6,200 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 15 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Eroded, convex summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Hooker balsamroot
Inclusion 2
Position on landscape: Side slopes below summits of plateaus
Distinctive present vegetation: None
Inclusion 3
Classification: Lithic Xerollic Camborthids, clayey, montmorillonitic, mesic
Position on landscape: Convex summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Utah juniper
Inclusion 4
Classification: Cumulic Haplaquolls, fine-loamy, mixed, frigid
Position on landscape: Stream terraces
Distinctive present vegetation: Sedge, rush

Interpretive Groups

Capability classification: Softscrabble, Dosie, and Devada soils—VIIs, nonirrigated
Range site: Softscrabble soil—023XY007NV; Dosie soil—023XY016NV; Devada soil—023XY031NV; Inclusion 1—023XY021NV; Inclusion 2—none; Inclusion 3—023XY035NV; Inclusion 4—023XY013NV

727—Softscrabble-Hart Camp association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Softscrabble stony loam, 8 to 30 percent slopes—45 percent
• Hart Camp very stony loam, 8 to 30 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Devada very stony loam, 4 to 15 percent slopes—5 percent
• Inclusion 2: Cumulic Cryaquolls loam, 2 to 4 percent slopes—5 percent

• Inclusion 3: Dosie extremely stony loam, 15 to 50 percent slopes—3 percent
• Inclusion 4: Rock outcrop—2 percent

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North- and east-facing, concave side slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 8 to 30 percent
Elevation: 5,700 to 6,800 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Hart Camp Soil

Classification: Aridic Argixerolls, loamy, mixed, frigid, shallow
Position on landscape: Convex side slopes of mountains
Parent material: Residuum and colluvium derived from tuff
Slope range: 8 to 30 percent
Elevation: 5,700 to 6,800 feet
Dominant present vegetation: Mountain big sagebrush, antelope bitterbrush, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 70 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 5 percent; pebbles, 5 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 13 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow

Available water capacity: 1.7 to 3.4 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.24; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Shoulders, crests, and toe slopes of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 2
Classification: Cumulic Cryaquolls, fine, montmorillonitic
Position on landscape: Toe slopes of mountains, adjacent to springs
Distinctive present vegetation: Sedge, rush
Inclusion 3
Classification: Pachic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: South-facing side slopes of mountains
Distinctive present vegetation: Bluebunch wheatgrass, mountain big sagebrush
Inclusion 4
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Softscrabble soil—VIs; Hart Camp soil—VIIs, nonirrigated
Range site: Softscrabble soil—023XY041NV; Hart Camp soil—023XY015NV; Inclusion 1—023XY031NV; Inclusion 2—023XY013NV; Inclusion 3—023XY016NV; Inclusion 4—none

728—Softscrabble-Hutchley-Burnborough association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Softscrabble very stony loam, 15 to 50 percent slopes—35 percent
• Hutchley very cobbly sandy loam, 8 to 30 percent slopes—30 percent
• Burnborough stony loam, 15 to 50 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Lithic Argixerolls stony loam, 8 to 50 percent slopes—4 percent
• Inclusion 2: Thulepah very stony loam, 8 to 30 percent slopes—4 percent
• Inclusion 3: Rock outcrop—4 percent
• Inclusion 4: Aridic Palexerolls stony loam, 8 to 30 percent slopes—3 percent

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Concave side slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 15 to 50 percent
Elevation: 6,000 to 7,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Hutchley Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Crests of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 8 to 30 percent
Elevation: 6,000 to 7,000 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Cobbles, 25 percent; pebbles, 20 percent

Depth: 0 to 6 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 14 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Burnborough Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Side slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 15 to 50 percent
Elevation: 6,000 to 7,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 1 percent; pebbles, 15 percent

Depth: 0 to 16 inches
Texture: Stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 to 60 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 5.1 to 6.4 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—5; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, fine-loamy, mixed, frigid
Position on landscape: Convex crests of mountains, adjacent to rock outcrop
Distinctive present vegetation: Curlleaf mountainmahogany, mountain big sagebrush, snowberry, bluegrass, bluebunch wheatgrass
Inclusion 2
Classification: Argic Pachic Cryoborolls, fine-loamy, mixed
Position on landscape: North-facing back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, snowberry, mountain brome
Inclusion 3
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None
Inclusion 4
Classification: Aridic Palexerolls, fine, montmorillonitic, frigid
Position on landscape: Slightly concave side slopes of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bluebunch wheatgrass, Idaho fescue

Interpretive Groups

Capability classification: Softscrabble and Hutchley soils—VIIs; Burnborough soil—VIIe, nonirrigated
Range site: Softscrabble soil—023XY041NV; Hutchley soil—023XY008NV; Burnborough soil—023XY041NV; Inclusion 1—023XY069NV; Inclusion 2—023XY019NV; Inclusion 3—none; Inclusion 4—023XY017NV

729—Softscrabble-Dosie-Hutchley association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Softscrabble very stony loam, 30 to 50 percent slopes—35 percent
• Dosie very stony loam, 30 to 50 percent slopes—30 percent
• Hutchley very cobbly sandy loam, 4 to 30 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—5 percent
• Inclusion 2: Wylo very stony loam, 4 to 30 percent slopes—5 percent
• Inclusion 3: Cumulic Cryoborolls stony loam, 4 to 30 percent slopes—3 percent
• Inclusion 4: Lithic Argixerolls stony loam, 50 to 75 percent slopes—2 percent

Characteristics of the Softscrabble Soil

Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 5,500 to 7,500 feet
Dominant present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Stones and boulders, 4 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 20 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 32 inches
Texture: Very cobbly clay loam

Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 32 to 61 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 61 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.2 to 8.7 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Dosie Soil

Classification: Pachic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: South- and west-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 5,500 to 7,500 feet
Dominant present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 5 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 41 inches
Texture: Very gravelly clay loam, very gravelly clay
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 41 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 4.0 to 5.4 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—3; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Hutchley Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Crests and shoulders of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 4 to 30 percent
Elevation: 5,500 to 7,500 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Cobbles, 25 percent; pebbles, 20 percent

Depth: 0 to 6 inches
Texture: Very cobbly sandy loam
Structure: Subangular blocky

Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 15 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None
Inclusion 2
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: The lower, convex crests of mountains
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot
Inclusion 3
Classification: Cumulic Cryoborolls
Position on landscape: Stream terraces adjacent to toe slopes of mountains
Distinctive present vegetation: Quaking aspen, snowberry, mountain brome
Inclusion 4
Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing, convex side slopes of mountains
Distinctive present vegetation: Curlleaf mountainmahogany, mountain big sagebrush, snowberry, bluebunch wheatgrass

Interpretive Groups

Capability classification: Softscrabble, Dosie, and Hutchley soils—VIIs, nonirrigated
Range site: Softscrabble soil—023XY007NV; Dosie soil—023XY016NV; Hutchley soil—023XY008NV; Inclusion 1—none; Inclusion 2—023XY037NV; Inclusion 3—023XY028NV; Inclusion 4—023XY069NV

730—Arzo-Indiano-Barnard association

Map Unit Setting

Position on landscape: Hills, pediments, and alluvial fan remnants

Composition

Major components:
• Arzo very stony loam, 8 to 30 percent slopes—35 percent
• Indiano stony fine sandy loam, 15 to 30 percent slopes—30 percent
• Barnard stony sandy loam, 2 to 8 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Terca very stony loam, 15 to 50 percent slopes—5 percent
• Inclusion 2: Springmeyer very stony sandy loam, 2 to 8 percent slopes—4 percent
• Inclusion 3: Rock outcrop—4 percent
• Inclusion 4: Cumulic Haplaquolls loam, 4 to 8 percent slopes—2 percent

Characteristics of the Arzo Soil

Classification: Aridic Calcic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: Concave pediments
Parent material: Alluvium and colluvium derived from basalt
Slope range: 8 to 30 percent
Elevation: 5,100 to 6,100 feet
Dominant present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 10 percent; pebbles, 15 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Platy parting to granular
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 25 inches
Texture: Clay loam or clay
Structure: Prismatic
Consistence: Very hard, very firm
Reaction: Neutral or mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 25 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.7 to 5.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.24; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Indiano Soil

Classification: Aridic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: Side slopes of hills and pediments
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 30 percent
Elevation: 5,100 to 6,100 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; pebbles, 15 percent

Depth: 0 to 8 inches
Texture: Stony fine sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Slightly acid
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 21 inches
Texture: Gravelly sandy clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 21 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 2.7 to 5.5 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.32; T value—2; wind erodibility group—4
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Barnard Soil

Classification: Aridic Durixerolls, fine, montmorillonitic, mesic
Position on landscape: Alluvial fan remnants
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 5,100 to 6,100 feet
Dominant present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; pebbles, 10 percent

Depth: 0 to 9 inches
Texture: Stony sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 9 to 23 inches
Texture: Clay
Structure: Subangular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 23 inches
Texture: Indurated hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 3.4 to 6.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.20; T value—2; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: South- and west-facing side slopes of hills and pediments
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 2
Classification: Aridic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: Inset fans adjacent to toe slopes of hills
Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 3
Position on landscape: Hills and pediments
Distinctive present vegetation: None
Inclusion 4
Classification: Cumulic Haplaquolls, fine-loamy, mixed, mesic
Position on landscape: Stream terraces adjacent to toe slopes of hills
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Interpretive Groups

Capability classification: Arzo and Barnard soils—VIIs, Indiano soil—VIs, nonirrigated
Range site: Arzo soil—023XY020NV; Indiano soil—023XY039NV; Barnard soil—023XY020NV; Inclusion 1—023XY039NV; Inclusion 2—023XY020NV; Inclusion 3—none; Inclusion 4—023XY009NV

750—Gitakup-Tresed-Ragtown association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Gitakup silty clay loam, 0 to 2 percent slopes—35 percent
• Tresed loam, 0 to 2 percent slopes—30 percent
• Ragtown silty clay loam, 0 to 2 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Playas—9 percent
• Inclusion 2: Isolde fine sand, 2 to 85 percent slopes—4 percent
• Inclusion 3: Cumulic Haplaquolls loam, 0 to 4 percent slopes—2 percent

Characteristics of the Gitakup Soil

Classification: Natric Camborthids, fine-silty, mixed, mesic
Position on landscape: Lake plain terraces
Parent material: Silty alluvium and lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,975 to 4,000 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 2 inches
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Very strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 2 to 11 inches
Texture: Silty clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 45 to 68

Depth: 11 to 29 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 23 to 45

Depth: 29 to 60 inches
Texture: Silty clay loam
Structure: Angular blocky
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.3 to 8.5 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Tresed Soil

Classification: Typic Torriorthents, clayey over loamy, montmorillonitic (calcareous), mesic
Position on landscape: The middle lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,975 to 4,000 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 4 inches
Texture: Loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 4 to 16 inches
Texture: Silty clay, clay loam
Structure: Prismatic or massive
Consistence: Slightly hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 68

Depth: 16 to 60 inches
Texture: Loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR 13 to 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.0 to 10.2 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic

Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,975 to 4,000 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 23 to 68

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Basin floors adjacent to the lowest lake plain terraces
Distinctive present vegetation: None
Inclusion 2
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Black greasewood, Indian ricegrass
Inclusion 3
Classification: Cumulic Haplaquolls, fine-silty, mixed, mesic
Position on landscape: Stream terraces cut into lake plain terraces
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Interpretive Groups

Capability classification: Gitakup, Tresed, and Ragtown—VIIs, nonirrigated
Range site: Gitakup soil—024XY002NV; Tresed soil—024XY003NV; Ragtown soil—027XY025NV; Inclusion 1—none; Inclusion 2—027XY016NV; Inclusion 3—023XY009NV

760—Ganaflan-Smaug-Trocken association

Map Unit Setting

Position on landscape: Lake plain terraces and alluvial fans

Composition

Major components:
• Ganaflan loam, 2 to 8 percent slopes—40 percent
• Smaug very fine sandy loam, 2 to 8 percent slopes—30 percent
• Trocken gravelly sandy loam, 4 to 8 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Veta gravelly fine sandy loam, 2 to 4 percent slopes—8 percent
• Inclusion 2: Hawsley loamy fine sand, 2 to 8 percent slopes—5 percent
• Inclusion 3: Badland, 4 to 30 percent slopes—1 percent
• Inclusion 4: Rock outcrop—1 percent

Characteristics of the Ganaflan Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic

Position on landscape: Lake plain terraces
Parent material: Mixed lacustrine deposits and residuum derived from tufa
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,300 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 4 inches
Texture: Loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR less than 13

Depth: 4 to 32 inches
Texture: Gravelly loam
Structure: Massive
Consistence: Hard, friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR less than 13

Depth: 32 to 48 inches
Texture: Unweathered bedrock

Depth: 48 to 60 inches
Texture: Stratified sand and gravelly sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 2.5 to 3.5 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—2; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Characteristics of the Smaug Soil

Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Silty lacustrine materials
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,300 feet
Dominant present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Very fine sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 10 to 60 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 8.3 to 9.5 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic

Position on landscape: Alluvial fans adjacent to the upper lake plain terraces
Parent material: Mixed alluvium
Slope range: 4 to 8 percent
Elevation: 3,900 to 4,300 feet
Dominant present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 3.0 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: The upper lake plain terraces and alluvial fans
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on lake plain terraces
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass
Inclusion 3
Position on landscape: Eroded lake plain terraces
Distinctive present vegetation: None
Inclusion 4
Position on landscape: Lake plain terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Ganaflan, Smaug, and Trocken soils—VIIs, nonirrigated
Range site: Ganaflan soil—024XY002NV; Smaug soil—024XY004NV; Trocken soil—024XY014NV; Inclusion 1—023XY038NV; Inclusion 2—027XY009NV; Inclusion 3—none; Inclusion 4—none

770—Tresed-Gitakup-Playas complex

Map Unit Setting

Position on landscape: Basin floors

Composition

Major components:
• Tresed loam, 0 to 2 percent slopes—40 percent
• Gitakup silty clay loam, 0 to 2 percent slopes—30 percent
• Playas—20 percent
Contrasting inclusions:
• Inclusion 1: Isolde fine sand, 4 to 8 percent slopes—4 percent
• Inclusion 2: Hawsley loamy sand, 4 to 8 percent slopes—2 percent
• Inclusion 3: Chuckles loam, 0 to 2 percent slopes—2 percent
• Inclusion 4: Fluventic Haploxerolls loam, 0 to 4 percent slopes—2 percent

Characteristics of the Tresed Soil

Classification: Typic Torriorthents, clayey over loamy, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,975 to 4,000 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 10 to 25 inches
Texture: Silty clay, clay loam
Structure: Prismatic or massive
Consistence: Slightly hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 68

Depth: 25 to 60 inches
Texture: Loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR 13 to 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.0 to 10.2 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Gitakup Soil

Classification: Natric Camborthids, fine-silty, mixed, mesic
Position on landscape: The higher lake plain terraces
Parent material: Silty alluvium and lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,975 to 4,000 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 2 inches
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Very strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 2 to 11 inches
Texture: Silty clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 45 to 68

Depth: 11 to 29 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 23 to 45

Depth: 29 to 60 inches
Texture: Silty clay loam
Structure: Angular blocky
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.3 to 8.5 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Playas

Position on landscape: The lowest part of basin floors
Dominant present vegetation: None

Contrasting Inclusions

Inclusion 1
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Black greasewood, Indian ricegrass
Inclusion 2
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on lake plain terraces
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass
Inclusion 3
Classification: Typic Camborthids, fine-silty, mixed, mesic
Position cn landscape: The middle lake plain terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush
Inclusion 4
Classification: Fluventic Haploxerolls, fine-loamy, mixed, mesic
Position on landscape: Stream terraces cut into lake plain terraces
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Interpretive Groups

Capability classification: Trocken and Gitakup soils—VIIs, nonirrigated; Playas—VIIIw
Range site: Tresed soil—024XY003NV; Gitakup soil—024XY002NV; Playas—none; Inclusion 1—027XY016NV; Inclusion 2—027XY009NV; Inclusion 3—024XY003NV; Inclusion 4—023XY009NV

780—Chuckles-Playas complex

Map Unit Setting

Position on landscape: Basin floors

Composition

Major components:
• Chuckles loam, 0 to 2 percent slopes—65 percent
• Playas—20 percent
Contrasting inclusions:
• Inclusion 1: Vertic Torriorthents clay, 0 to 2 percent slopes—8 percent
• Inclusion 2: Fluventic Haploxerolls loam, 2 to 4 percent slopes—3 percent
• Inclusion 3: Swingler loam, 0 to 2 percent slopes—3 percent
• Inclusion 4: Isolde fine sand, 4 to 15 percent slopes—1 percent

Characteristics of the Chuckles Soil

Classification: Typic Camborthids, fine-silty, mixed, mesic
Position on landscape: Lake plain terraces
Parent material: Loamy alluvium over loamy lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,980 to 4,000 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 6 inches
Texture: Loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 45

Depth: 6 to 15 inches
Texture: Silt loam
Structure: Prismatic
Consistence: Hard, friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 45

Depth: 15 to 34 inches
Texture: Silt loam, loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 45

Depth: 34 to 60 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Extremely hard, brittle
Reaction: Moderately alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 45

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 10.0 to 11.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Playas

Position on landscape: The lowest part of basin floors
Dominant present vegetation: None

Contrasting Inclusions

Inclusion 1
Classification: Vertic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lowest lake plain terraces
Distinctive present vegetation: Black greasewood, seepweed, shadscale

Inclusion 2
Classification: Fluventic Haploxerolls, fine-silty, mixed, mesic
Position on landscape: Stream terraces cut into lake plain terraces
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Inclusion 3
Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush

Inclusion 4
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Black greasewood, Indian ricegrass

Interpretive Groups

Capability classification: Chuckles soil—VIIs, nonirrigated; Playas—VIIIw
Range site: Chuckles soil—024XY003NV; Playas—none; Inclusion 1—027XY025NV; Inclusion 2—023XY009NV; Inclusion 3—024XY003NV; Inclusion 4—027XY016NV

781—Chuckles-Ragtown-Playas complex

Map Unit Setting

Position on landscape: Basin floors

Composition

Major components:
- Chuckles loam, 0 to 2 percent slopes—50 percent
- Ragtown loam, 0 to 2 percent slopes—20 percent
- Playas—15 percent

Contrasting inclusions:
- Inclusion 1: Gitakup silty clay loam, 0 to 2 percent slopes—7 percent
- Inclusion 2: Fluventic Haploxerolls loam, 2 to 4 percent slopes—4 percent
- Inclusion 3: Swingler loam, 0 to 2 percent slopes—4 percent

Characteristics of the Chuckles Soil

Classification: Typic Camborthids, fine-silty, mixed, mesic
Position on landscape: Lake plain terraces
Parent material: Loamy alluvium over loamy lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,975 to 4,000 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 6 inches
Texture: Loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 45

Depth: 6 to 15 inches
Texture: Silt loam
Structure: Prismatic
Consistence: Hard, friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 45

Depth: 15 to 34 inches
Texture: Silt loam, loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Strongly alkaline

Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 45

Depth: 34 to 60 inches
Texture: Silty clay loam
Structure: Angular blocky
Consistence: Extremely hard, brittle
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 45

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 10.0 to 11.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,975 to 4,000 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Playas

Position on landscape: The lowest part of basin floors

Contrasting Inclusions

Inclusion 1
Classification: Natric Camborthids, fine-silty, mixed, mesic
Position on landscape: The higher lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Fluventic Haploxerolls, fine-silty, mixed, mesic
Position on landscape: Stream terraces cut into lake plain terraces
Distinctive present vegetation: Basin big sagebrush, basin wildrye

Inclusion 3
Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: The middle part of lake plain terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush

Interpretive Groups

Capability classification: Chuckles and Ragtown soils—VIIs, nonirrigated; Playas—VIIIs

Range site: Chuckles soil—024XY003NV; Ragtown soil—027XY025NV; Playas—none; Inclusion 1—024XY002NV; Inclusion 2—023XY009NV; Inclusion 3—024XY003NV

790—Galeppi-Barnard association

Map Unit Setting

Position on landscape: Summits of fan piedmonts, fan aprons, and inset fan remnants

Composition

Major components:
- Galeppi stony sandy loam, 4 to 15 percent slopes—55 percent
- Barnard stony sandy loam, 2 to 8 percent slopes—30 percent

Contrasting inclusions:
- Inclusion 1: Leviathan very stony sandy loam, 4 to 8 percent slopes—7 percent
- Inclusion 2: Aridic Argixerolls stony loam, 4 to 30 percent slopes—6 percent
- Inclusion 3: Aridic Durixerolls stony loam, 2 to 8 percent slopes—2 percent

Characteristics of the Galeppi Soil

Classification: Durargidic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: Fan aprons and inset fan remnants
Parent material: Mixed alluvium
Slope range: 4 to 15 percent
Elevation: 5,200 to 5,800 feet
Dominant present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 3 percent; cobbles, 5 percent; pebbles, 25 percent

Depth: 0 to 9 inches
Texture: Stony sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Slightly acid
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 9 to 27 inches
Texture: Cobbly sandy clay loam, cobbly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 27 to 60 inches
Texture: Cobbly sandy loam
Structure: Massive
Consistence: Hard, brittle
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 4.7 to 6.5 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Barnard Soil

Classification: Aridic Durixerolls, fine, montmorillonitic, mesic
Position on landscape: Summits of fan piedmont remnants
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 5,200 to 5,800 feet
Dominant present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; pebbles, 10 percent

Depth: 0 to 15 inches
Texture: Stony sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 to 26 inches
Texture: Clay
Structure: Subangular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 26 inches
Texture: Indurated hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 3.4 to 6.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.20; T value—2; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Fan aprons
Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 2
Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic, shallow
Position on landscape: Low hills adjacent to the higher fan piedmont remnants
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 3
Classification: Aridic Durixerolls, clayey, montmorillonitic, mesic, shallow
Position on landscape: Convex summits of fan piedmont remnants
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass

Interpretive Groups

Capability classification: Galeppi soil—VIs, Barnard soil—VIIs, nonirrigated
Range site: Galeppi and Barnard soils—023XY020NV; Inclusion 1—023XY020NV; Inclusion 2—023XY039NV; Inclusion 3—023XY031NV

800—Boulder Lake silty clay

Map Unit Setting

Position on landscape: Interplateau basins

Composition

Major component:
• Boulder Lake silty clay, 0 to 2 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Boulder Lake silt loam, 0 to 2 percent slopes—8 percent
• Inclusion 2: Boulder Lake silty clay, 0 to 2 percent slopes—4 percent
• Inclusion 3: Fluventic Haploxerolls loam, 0 to 2 percent slopes—2 percent
• Inclusion 4: Cumulic Haplaquolls clay loam, 0 to 2 percent slopes—1 percent

Characteristics of the Boulder Lake Soil

Classification: Aquic Chromoxererts, fine, montmorillonitic, frigid
Position on landscape: Interplateau basins
Parent material: Clayey lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 5,620 to 5,680 feet
Dominant present vegetation: Silver sagebrush, Nevada bluegrass, Baltic rush

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 44 degrees F
Frost-free period: About 70 days

Typical Profile

Depth: 0 to 1 inch
Texture: Silty clay
Structure: Granular
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 60 inches
Texture: Clay or silty clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, very firm
Reaction: Mildly alkaline or moderately alkaline

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Seasonal high water table: 12 inches above to 18 inches below the surface
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 10.6 to 12.0 inches
Water-supplying capacity: 8 to 16 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Aquic Chromoxererts, fine, montmorillonitic, frigid
Position on landscape: The slightly higher areas of interplateau basins
Distinctive present vegetation: Silver sagebrush, Nevada bluegrass, Baltic rush
Inclusion 2
Classification: Aquic Chromoxererts, fine, montmorillonitic, frigid
Position on landscape: The lower areas of interplateau basins
Distinctive present vegetation: Povertyweed, mat muhly
Inclusion 3
Classification: Fluventic Haploxerolls, fine-loamy, mixed, frigid
Position on landscape: Stream terraces cut into interplateau basins
Distinctive present vegetation: Mountain big sagebrush, antelope bitterbrush, bluebunch wheatgrass
Inclusion 4
Classification: Cumulic Haplaquolls, fine, montmorillonitic, frigid
Position on landscape: Interplateau basins adjacent to springs
Distinctive present vegetation: Sedge, rush

Interpretive Groups

Capability classification: Boulder Lake soil—VIw, nonirrigated
Range site: Boulder Lake soil—023XY003NV; Inclusion 1—023XY003NV; Inclusion 2—023XY023NV; Inclusion 3—023XY022NV; Inclusion 4—023XY013NV

810—Voltaire-Truckee association

Map Unit Setting

Position on landscape: Flood plains

Composition

Major components:
• Voltaire silty clay loam, 0 to 2 percent slopes—50 percent
• Truckee clay loam, 0 to 2 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Aeric Halaquepts sandy loam, 0 to 2 percent slopes—5 percent
• Inclusion 2: Typic Haplaquolls loam, 0 to 2 percent slopes—4 percent
• Inclusion 3: Aquic Torriorthents loam, 0 to 2 percent slopes—3 percent
• Inclusion 4: Fluvaquentic Haplaquolls silty clay, 0 to 2 percent slopes—3 percent

Characteristics of the Voltaire Soil

Classification: Fluvaquentic Haplaquolls, fine-loamy, mixed (calcareous), mesic
Position on landscape: The lower flood plains
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,700 feet
Dominant present vegetation: Nevada bluegrass, meadow barley

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 100 days

Typical Profile

Depth: 0 to 20 inches
Texture: Silty clay loam
Structure: Subangular blocky
Consistence: Friable
Reaction: Strongly alkaline
Salinity: 4 to 8 mmhos per cm
Sodicity: SAR less than 13

Depth: 20 to 60 inches
Texture: Clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Moderately alkaline
Salinity: 4 to 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: 0 to 18 inches
Flooding: Frequency—occasional; duration—brief; months—December through March

Permeability: Slow
Available water capacity: 10.0 to 11.2 inches
Water-supplying capacity: 14 to 26 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: High

Characteristics of the Truckee Soil

Classification: Fluvaquentic Haploxerolls, fine-loamy, mixed, mesic
Position on landscape: The higher flood plains
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,700 feet
Dominant present vegetation: Creeping wildrye, rush, sedge, Nevada bluegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 100 days

Typical Profile

Depth: 0 to 13 inches
Texture: Clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 13 to 60 inches
Texture: Loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Moderately alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: 24 to 60 inches
Frequency of flooding: Rare
Permeability: Moderately slow
Available water capacity: 8.9 to 10.6 inches
Water-supplying capacity: 20 to 26 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Contrasting Inclusions

Inclusion 1
Classification: Aeric Halaquepts, fine-loamy, mixed (calcareous), mesic
Position on landscape: Margins of flood plains
Distinctive present vegetation: Black greasewood, inland saltgrass, Baltic rush
Inclusion 2
Classification: Typic Haplaquolls, fine-loamy, mixed (calcareous), mesic
Position on landscape: The lowest part of flood plains
Distinctive present vegetation: Cattail, bulrush
Inclusion 3
Classification: Aquic Torriorthents, fine-loamy, mixed (calcareous), mesic
Position on landscape: Margins of flood plains
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye
Inclusion 4
Classification: Fluvaquentic Haplaquolls, fine, montmorillonitic (calcareous), mesic
Position on landscape: Flood plains
Distinctive present vegetation: Sedge, rush

Interpretive Groups

Capability classification: Voltaire soil—VIw, Truckee soil—IVw, irrigated; Voltaire and Truckee soils—VIIw, nonirrigated
Range site: Voltaire soil—026XY003NV; Truckee soil—026XY001NV; Inclusion 1—027XY005NV; Inclusion 2—027XY001NV; Inclusion 3—023XY005NV; Inclusion 4—023XY013NV

811—Voltaire-Fluvaquents-Veta association

Map Unit Setting

Position on landscape: Stream terraces, channels, and fanlettes

Composition

Major components:
• Voltaire loam, 0 to 2 percent slopes—35 percent
• Fluvaquents very gravelly coarse sand, 0 to 2 percent slopes—30 percent
• Veta gravelly sandy loam, 2 to 4 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents gravelly sandy loam, 0 to 8 percent slopes—5 percent

• Inclusion 2: Xerollic Haplargids stony sandy loam, 8 to 50 percent slopes—4 percent
• Inclusion 3: Rock outcrop—1 percent

Characteristics of the Voltaire Soil

Classification: Fluvaquentic Haplaquolls, fine-loamy, mixed (calcareous), mesic
Position on landscape: Stream terraces
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Basin big sagebrush, basin wildrye

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 100 days

Typical Profile

Depth: 0 to 20 inches
Texture: Loam
Structure: Subangular blocky
Consistence: Friable
Reaction: Moderately alkaline
Salinity: 4 to 8 mmhos per cm
Sodicity: SAR less than 6

Depth: 20 to 60 inches
Texture: Clay loam
Structure: Massive
Consistence: Friable
Reaction: Moderately alkaline
Salinity: Less than 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: 60 to 72 inches (artificially drained)
Frequency of flooding: Rare
Permeability: Slow
Available water capacity: 10.0 to 11.2 inches
Water-supplying capacity: 14 to 18 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Fluvaquents

Classification: Fluvaquents
Position on landscape: Stream channels
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Willow, cottonwood, basin big sagebrush

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 100 days

Representative Profile

Surface cover: Cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 6 inches
Texture: Very gravelly coarse sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 60 inches
Texture: Stratified very gravelly coarse sand to clay loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: 0 to 36 inches
Flooding: Frequency—frequent; duration—brief or long; months—December through August
Permeability: Moderate
Available water capacity: 2.3 to 5.7 inches
Water-supplying capacity: 14 to 18 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—5; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: High

Characteristics of the Veta Soil

Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: The higher stream terraces and fanlettes
Parent material: Mixed alluvium
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,400 feet

Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 30 percent

Depth: 0 to 6 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 12 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 60 inches
Texture: Stratified extremely gravelly loamy sand to very gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 3.0 to 4.0 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower stream terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush

Inclusion 2
Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Toe slopes of hills adjacent to stream terraces and fanlettes
Distinctive present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail

Inclusion 3
Position on landscape: Side slopes of stream terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Voltaire soil—IIIw, Veta soil—IVs, irrigated; Voltaire soil—VIw, Fluvaquents—VIIw, Veta soil—VIIw, nonirrigated
Range site: Voltaire soil—023XY009NV; Fluvaquents—023XY034NV; Veta soil—023XY038NV; Inclusion 1—024XY003NV; Inclusion 2—026XY022NV; Inclusion 3—none

820—Horsecamp-Mahala association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Horsecamp cobbly clay, 0 to 8 percent slopes—55 percent
• Mahala very cobbly silt loam, 0 to 8 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Aridic Argixerolls stony loam, 2 to 15 percent slopes—3 percent
• Inclusion 2: Softscrabble very stony loam, 30 to 50 percent slopes—3 percent
• Inclusion 3: Rock outcrop—3 percent
• Inclusion 4: Boulder Lake silty clay, 0 to 2 percent slopes—1 percent

Characteristics of the Horsecamp Soil

Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: The higher areas on summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 0 to 8 percent
Elevation: 5,600 to 5,800 feet
Dominant present vegetation: Basin big sagebrush, oneflower helianthella, western wheatgrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 15 percent; pebbles, 5 percent

Depth: 0 to 1 inch
Texture: Cobbly clay
Structure: Granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 20 inches
Texture: Clay
Structure: Prismatic
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 40 inches
Texture: Clay
Structure: Massive
Consistence: Very hard, friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 40 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 5.7 to 8.5 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—3; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Mahala Soil

Classification: Xerollic Paleargids, fine, montmorillonitic, mesic
Position on landscape: The lower areas on summits of plateaus
Parent material: Residuum derived from tuff and influenced by loess
Slope range: 0 to 8 percent
Elevation: 5,600 to 5,800 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 40 percent; pebbles, 5 percent

Depth: 0 to 3 inches
Texture: Very cobbly silt loam
Structure: Fine platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 16 inches
Texture: Clay
Structure: Columnar
Consistence: Extremely hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 to 36 inches
Texture: Clay, silty clay loam
Structure: Prismatic, subangular blocky
Consistence: Hard, friable
Reaction: Mildly alkaline or moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 36 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 2.9 to 5.9 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—2; wind erodibility group—8

Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: Low hills
Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 2
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Concave, north-facing back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass
Inclusion 3
Position on landscape: Plateaus
Distinctive present vegetation: None
Inclusion 4
Classification: Aquic Chromoxererts, fine, montmorillonitic, frigid
Position on landscape: Interplateau basins
Distinctive present vegetation: Silver sagebrush, Nevada bluegrass, Baltic rush

Interpretive Groups

Capability classification: Horsecamp soil—VIe, Mahala soil—VIIs, nonirrigated
Range site: Horsecamp soil—023XY033NV; Mahala soil—023XY031NV; Inclusion 1—023XY020NV; Inclusion 2—023XY007NV; Inclusion 3—none; Inclusion 4—023XY003NV

831—Kayo very stony sandy loam, 2 to 8 percent slopes

Map Unit Setting

Position on landscape: Summits of fan piedmont remnants

Composition

Major component:
• Kayo very stony sandy loam, 2 to 8 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Fulstone very stony loam, 4 to 8 percent slopes—4 percent
• Inclusion 2: Hawsley loamy sand, 2 to 8 percent slopes—3 percent
• Inclusion 3: Veta stony loam, 2 to 8 percent slopes—3 percent

Characteristics of the Kayo Soil

Classification: Xeralfic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Summits of fan piedmont remnants
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,600 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 5 percent; pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Very stony sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 18 inches
Texture: Very gravelly sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 to 60 inches
Texture: Very gravelly loamy coarse sand, very gravelly sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Neutral to moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 2.6 to 4.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium

Hydrologic group: B
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Abruptic Xerollic Durargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: The higher areas on summits of fan piedmont remnants
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on fan piedmont remnants
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass
Inclusion 3
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Inset fans
Distinctive present vegetation: Wyoming big sagebrush, Douglas rabbitbrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Kayo soil—VIIs, nonirrigated
Range site: Kayo soil—026XY024NV; Inclusion 1—023XY047NV; Inclusion 2—027XY009NV; Inclusion 3—026XY016NV

841—Beaches

Map Unit Setting

Position on landscape: Beach bars and lagoons adjacent to Pyramid Lake

Composition

Major component:
• Beaches—85 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—7 percent
• Inclusion 2: Typic Torriorthents sandy loam, 2 to 8 percent slopes—4 percent
• Inclusion 3: Aquic Torriorthents loam, 0 to 8 percent slopes—3 percent
• Inclusion 4: Playas—1 percent

Characteristics of Beaches

Position on landscape: Beaches
Elevation: 3,780 to 3,820 feet
Dominant present vegetation: None

Contrasting Inclusions

Inclusion 1
Position on landscape: Scattered tufa peaks
Distinctive present vegetation: None
Inclusion 2
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces adjacent to beaches
Distinctive present vegetation: Inland saltgrass, Russian thistle
Inclusion 3
Classification: Aquic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces adjacent to beaches
Distinctive present vegetation: Salt cedar
Inclusion 4
Position on landscape: Basin floors adjacent to beaches
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Beaches—VIIIw
Range site: Beaches—none; Inclusion 1—none; Inclusion 2—none; Inclusion 3—none; Inclusion 4—none

850—Osobb-Rezave-Fireball association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Osobb extremely stony fine sandy loam, 30 to 50 percent slopes—35 percent
• Rezave extremely stony very fine sandy loam, 0 to 15 percent slopes—30 percent
• Fireball extremely stony fine sandy loam, 30 to 50 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Typic Natrargids extremely stony very fine sandy loam, 4 to 30 percent slopes—7 percent
• Inclusion 2: Old Camp extremely stony fine sandy loam, 15 to 50 percent slopes—5 percent
• Inclusion 3: Rock outcrop—3 percent

Characteristics of the Osobb Soil

Classification: Entic Durorthids, loamy-skeletal, mixed, mesic, shallow
Position on landscape: Back slopes of plateaus

Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 20 percent; cobbles, 20 percent; pebbles, 50 percent

Depth: 0 to 6 inches
Texture: Extremely stony fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 6 to 14 inches
Texture: Very cobbly fine sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 14 to 16 inches
Texture: Indurated hardpan

Depth: 16 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 8 to 20 inches
Depth to bedrock: 9 to 30 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 0.5 to 1.2 inches
Water-supplying capacity: 3 to 5 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Rezave Soil

Classification: Lithic Natrargids, clayey, montmorillonitic, mesic
Position on landscape: Summits of plateaus
Parent material: Residuum derived from basalt
Slope range: 0 to 15 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Stones and boulders, 15 percent; cobbles, 10 percent; pebbles, 25 percent

Depth: 0 to 4 inches
Texture: Extremely stony very fine sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 4 to 13 inches
Texture: Clay loam
Structure: Prismatic
Consistence: Slightly hard, friable
Reaction: Strongly alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 13 to 19 inches
Texture: Gravelly clay loam
Structure: Angular blocky
Consistence: Slightly hard, friable
Reaction: Strongly alkaline
Salinity: 2 to 8 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 19 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.6 to 2.3 inches
Water-supplying capacity: 6 to 8 inches
Runoff: Medium
Hydrologic group: D

Erosion factors (surface layer): K value—.24; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Fireball Soil

Classification: Typic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Concave back slopes and foot slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 25 percent; cobbles, 20 percent; pebbles, 35 percent

Depth: 0 to 5 inches
Texture: Extremely stony fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 5 to 17 inches
Texture: Very gravelly loam, very cobbly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR 13 to 30

Depth: 17 to 41 inches
Texture: Very gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 41 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 2.8 to 4.2 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Rapid
Hydrologic group: B
Erosion factors (surface layer): K value—.10; T value—3; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Natrargids, loamy-skeletal, mixed, mesic
Position on landscape: Slightly concave shoulders of plateaus
Distinctive present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: The higher, north- and east-facing side slopes of plateaus
Distinctive present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail
Inclusion 3
Position on landscape: Plateaus
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Osobb, Rezave, and Fireball soils—VIIs, nonirrigated
Range site: Osobb soil—027XY027NV; Rezave soil—027XY018NV; Fireball soil—027XY017NV; Inclusion 1—027XY018NV; Inclusion 2—026XY022NV; Inclusion 3—none

890—Slocave-Arclay-Rock outcrop association

Map Unit Setting

Position on landscape: Hills

Composition

Major components:
• Slocave very gravelly coarse sandy loam, 50 to 75 percent slopes—45 percent

• Arclay very gravelly coarse sandy loam, 50 to 75 percent slopes—25 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Arclay very gravelly coarse sandy loam, 15 to 50 percent slopes—8 percent
• Inclusion 2: Xerollic Haplargids gravelly sandy loam, 30 to 75 percent slopes—7 percent

Characteristics of the Slocave Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic, shallow
Position on landscape: South- and west-facing side slopes of hills
Parent material: Residuum and colluvium derived from granite
Slope range: 50 to 75 percent
Elevation: 4,300 to 5,300 feet
Dominant present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 2 inches
Texture: Very gravelly coarse sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 2 to 7 inches
Texture: Very gravelly coarse sandy loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 7 to 30 inches
Texture: Weathered bedrock

Depth: 30 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 14 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 0.3 to 1.0 inch
Water-supplying capacity: 4 to 6 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Arclay Soil

Classification: Aridic Argixerolls, loamy, mixed, mesic, shallow
Position on landscape: North- and east-facing side slopes of hills
Parent material: Residuum and colluvium derived from granite
Slope range: 50 to 75 percent
Elevation: 4,500 to 5,300 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 1 percent; cobbles, 10 percent; pebbles, 45 percent

Depth: 0 to 5 inches
Texture: Very gravelly coarse sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 14 inches
Texture: Gravelly sandy clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral or mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 to 40 inches
Texture: Weathered bedrock

Depth: 40 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches

Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.2 to 2.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Crests and side slopes of hills
Kind of rock: Granite

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, loamy, mixed, mesic, shallow
Position on landscape: Crests and shoulders of hills
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, Thurber needlegrass
Inclusion 2
Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic, shallow
Position on landscape: The upper, south-facing shoulders and back slopes of hills
Distinctive present vegetation: Utah juniper, Lahontan sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Slocave and Arclay soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Slocave soil—027XY017NV; Arclay soil—027XY079NV; Rock outcrop—none; Inclusion 1—027XY079NV; Inclusion 2—023XY063NV

892—Slocave-Singatse-Jaybee association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Slocave very gravelly coarse sandy loam, 15 to 50 percent slopes—35 percent
• Singatse very gravelly sandy loam, 30 to 50 percent slopes—30 percent
• Jaybee very gravelly sandy loam, 15 to 50 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—7 percent
• Inclusion 2: Fluventic Haploxerolls stony loam, 2 to 4 percent slopes—3 percent
• Inclusion 3: Theon very gravelly loam, 8 to 30 percent slopes—3 percent
• Inclusion 4: Fluvaquentic Haploxerolls very gravelly loamy sand, 2 to 4 percent slopes—2 percent

Characteristics of the Slocave Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic, shallow
Position on landscape: South-, east-, and west-facing side slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,500 feet
Dominant present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 1 inch
Texture: Very gravelly coarse sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 1 to 7 inches
Texture: Very gravelly coarse sandy loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 7 to 27 inches
Texture: Weathered bedrock

Depth: 27 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 14 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 0.3 to 1.0 inch
Water-supplying capacity: 4 to 6 inches

Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Singatse Soil

Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: South-facing, convex side slopes of mountains
Parent material: Residuum and colluvium derived from volcanic rock
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,500 feet
Dominant present vegetation: Shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 1 inch
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 1 to 6 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 6 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 10 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.3 to 0.6 inch
Water-supplying capacity: 3 to 5 inches

Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: North-, east-, and west-facing side slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches

Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Position on landscape: Side slopes of mountains
Distinctive present vegetation: None
Inclusion 2
Classification: Fluventic Haploxerolls, loamy-skeletal, mixed, mesic
Position on landscape: Stream terraces adjacent to toe slopes of mountains
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye
Inclusion 3
Classification: Lithic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Hills at the lower elevations
Distinctive present vegetation: Shadscale, Bailey greasewood, bottlebrush squirreltail, desert needlegrass
Inclusion 4
Classification: Fluvaquentic Haploxerolls, loamy-skeletal, mixed, mesic
Position on landscape: Channels adjacent to springs and toe slopes of mountains
Distinctive present vegetation: Willow, cottonwood, basin big sagebrush

Interpretive Groups

Capability classification: Slocave, Singatse, and Jaybee soils—VIIs, nonirrigated
Range site: Slocave soil—027XY017NV; Singatse soil—027XY027NV; Jaybee soil—023XY047NV; Inclusion 1—none; Inclusion 2—023XY005NV; Inclusion 3—027XY019NV; Inclusion 4—023XY034NV

893—Slocave-Rock outcrop association

Map Unit Setting

Position on landscape: Hills

Composition

Major components:
• Slocave very stony sandy loam, 30 to 50 percent slopes—45 percent
• Slocave very stony sandy loam, 8 to 30 percent slopes—25 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents stony loam, 4 to 15 percent slopes—9 percent
• Inclusion 2: Slocave very gravelly coarse sandy loam, 2 to 8 percent slopes—6 percent

Characteristics of the Slocave Soil, 30 to 50 Percent Slopes

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic, shallow
Position on landscape: Back slopes of hills
Parent material: Residuum and colluvium derived from granite
Slope range: 30 to 50 percent
Elevation: 4,200 to 4,700 feet
Dominant present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 5 percent; pebbles, 25 percent

Depth: 0 to 1 inch
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 1 to 7 inches
Texture: Very gravelly coarse sandy loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 7 to 27 inches
Texture: Weathered bedrock

Depth: 27 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 14 inches

Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 0.3 to 1.0 inch
Water-supplying capacity: 4 to 6 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Slocave Soil, 8 to 30 Percent Slopes

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic, shallow
Position on landscape: Shoulders of hills
Parent material: Residuum and colluvium derived from granite
Slope range: 8 to 30 percent
Elevation: 4,200 to 4,700 feet
Dominant present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 5 percent; pebbles, 25 percent

Depth: 0 to 1 inch
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 1 to 7 inches
Texture: Very gravelly coarse sandy loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 7 to 27 inches
Texture: Weathered bedrock

Depth: 27 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 14 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 0.3 to 1.0 inch
Water-supplying capacity: 4 to 6 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Rock Outcrop

Position on landscape: Summits and side slopes of hills
Kind of rock: Granite

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Toe slopes of hills adjacent to lake plain terrace remnants
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic, shallow
Position on landscape: Summits and shoulders of hills
Distinctive present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Interpretive Groups

Capability classification: Slocave soils—VIIs, nonirrigated
Range site: Slocave soils—027XY017NV; Rock outcrop—none; Inclusion 1—024XY002NV; Inclusion 2—027XY017NV

900—Playas

Map Unit Setting

Position on landscape: Basin floors

Composition

Major component:
• Playas—95 percent
Contrasting inclusions:
• Inclusion 1: Umberland silty clay loam, 0 to 2 percent slopes—4 percent

• Inclusion 2: Haplaquolls loam, 2 to 4 percent slopes—1 percent

Characteristics of the Playas

Position on landscape: The lowest part of basin floors
Slope range: 0 to 1 percent
Dominant present vegetation: None

Typical Profile

Depth: 0 to 6 inches
Texture: Silty clay
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 100

Depth: 6 to 60 inches
Texture: Silty clay
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 100

Soil and Water Features

Seasonal high water table: 12 inches above to 12 inches below the surface
Permeability: Very slow
Runoff: Ponded
Hydrologic group: D
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—5

Contrasting Inclusions

Inclusion 1
Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lowest lake plain terraces
Distinctive present vegetation: Inland saltgrass
Inclusion 2
Classification: Haplaquolls, loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces adjacent to seeps
Distinctive present vegetation: Nevada bluegrass, meadow barley

Interpretive Groups

Capability classification: Playas—VIIIw
Range site: Playas—none; Inclusion 1—026XY002NV; Inclusion 2—026XY003NV

901—Dune land-Playas complex, 0 to 30 percent slopes

Map Unit Setting

Position on landscape: Sand dunes and basin floors

Composition

Major components:
• Dune land, 4 to 30 percent slopes—65 percent
• Playas, 0 to 1 percent slopes—30 percent
Contrasting inclusion:
• Inclusion 1: Isolde fine sand, 4 to 30 percent slopes—5 percent

Characteristics of Dune Land

Position on landscape: Unstabilized sand dunes
Slope range: 4 to 30 percent
Dominant present vegetation: None

Typical Profile

Depth: 0 to 6 inches
Texture: Fine sand

Depth: 6 to 60 inches
Texture: Fine sand

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Permeability: Rapid or very rapid
Runoff: Very slow or slow
Hydrologic group: A
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—1

Characteristics of the Playas

Position on landscape: The lowest part of basin floors
Slope range: 0 to 1 percent
Dominant present vegetation: None

Typical Profile

Depth: 0 to 6 inches
Texture: Silty clay
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 100

Depth: 6 to 60 inches
Texture: Silty clay
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 100

Soil and Water Features

Seasonal high water table: 12 inches above to 12 inches below the surface
Permeability: Very slow
Runoff: Ponded
Hydrologic group: D
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—5

Contrasting Inclusion

Inclusion 1

Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Semistabilized dunes
Distinctive present vegetation: Black greasewood, Indian ricegrass

Interpretive Groups

Capability classification: Dune land—VIIIe; Playas—VIIIw
Range site: Dune land—none; Playas—none; Inclusion 1—027XY016NV

910—Shawave-Deadyon association

Map Unit Setting

Position on landscape: Fan piedmonts

Composition

Major components:
• Shawave gravelly sandy loam, 2 to 8 percent slopes—45 percent
• Deadyon sandy loam, 2 to 8 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Xerollic Haplargids very gravelly loam, 4 to 15 percent slopes—8 percent
• Inclusion 2: Shawave gravelly sandy loam, 8 to 30 percent slopes—4 percent
• Inclusion 3: Davey gravelly loamy sand, 2 to 8 percent slopes—3 percent

Characteristics of the Shawave Soil

Classification: Xerollic Haplargids, fine-loamy, mixed, mesic
Position on landscape: Summits of fan piedmont remnants
Parent material: Granitic alluvium influenced by loess and volcanic ash
Slope range: 2 to 8 percent
Elevation: 4,200 to 4,700 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 52 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 15 percent

Depth: 0 to 8 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 16 inches
Texture: Sandy clay loam
Structure: Prismatic
Consistence: Hard, friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 to 40 inches
Texture: Coarse sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 40 to 60 inches
Texture: Loamy coarse sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 4.6 to 6.2 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Deadyon Soil

Classification: Xerollic Haplargids, coarse-loamy, mixed, mesic
Position on landscape: Inset fan remnants
Parent material: Granitic alluvium
Slope range: 2 to 8 percent
Elevation: 4,200 to 4,700 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 15 percent

Depth: 0 to 5 inches
Texture: Sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 24 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 to 35 inches
Texture: Sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 35 to 60 inches
Texture: Gravelly loamy sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 4.3 to 7.7 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Haplargids, clayey-skeletal, montmorillonitic, mesic
Position on landscape: Fan piedmont remnants in areas of volcanic alluvium
Distinctive present vegetation: Wyoming big sagebrush, Sandberg bluegrass
Inclusion 2
Classification: Xerollic Haplargids, fine-loamy, mixed, mesic
Position on landscape: Side slopes of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 3
Classification: Xerollic Camborthids, sandy, mixed, mesic
Position on landscape: Beach terraces adjacent to the lower part of fan piedmonts
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, Indian ricegrass

Interpretive Groups

Capability classification: Shawave and Deadyon soils—IIIe, irrigated; Shawave soil—VIc, Deadyon soil—VIIc, nonirrigated
Range site: Shawave soil—027XY008NV; Deadyon soil—027XY008NV; Inclusion 1—027XY007NV; Inclusion 2—027XY008NV; Inclusion 3—023XY051NV

930—Typic Torriorthents-Aquic Torriorthents complex, 0 to 4 percent slopes

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Typic Torriorthents very fine sandy loam, 0 to 4 percent slopes—50 percent
• Aquic Torriorthents very fine sandy loam, 0 to 4 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Isolde fine sand, 2 to 15 percent slopes—5 percent
• Inclusion 2: Rock outcrop—5 percent

Characteristics of the Typic Torriorthents

Classification: Typic Torriorthents
Position on landscape: Lake plain terraces
Parent material: Mixed lacustrine sediments
Slope range: 0 to 4 percent

Elevation: 3,800 to 3,900 feet
Dominant present vegetation: Inland saltgrass, Russian thistle

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 3 inches
Texture: Very fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 3 to 60 inches
Texture: Stratified loamy fine sand to silty clay loam
Structure: Single grained or angular blocky
Consistence: Loose to very hard, friable
Reaction: Strongly alkaline
Salinity: 2 to 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 6.0 to 10.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: C
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Aquic Torriorthents

Classification: Aquic Torriorthents
Position on landscape: Lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 4 percent
Elevation: 3,800 to 3,900 feet
Dominant present vegetation: Inland saltgrass, Russian thistle

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Very fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 0 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified fine sand to silty clay
Structure: Single grained, massive, or angular blocky
Consistence: Loose to very hard, friable
Reaction: Moderately alkaline or strongly alkaline
Salinity: 2 to 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: 36 to 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 6.4 to 11.0 inches
Water-supplying capacity: 15 to 25 inches
Runoff: Slow
Hydrologic group: C
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Contrasting Inclusions

Inclusion 1
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Black greasewood, Indian ricegrass

Inclusion 2
Position on landscape: Lake plain terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Typic Torriorthents—IIIc, Aquic Torriorthents—IIIw, irrigated; Typic Torriorthents—VIIc, Aquic Torriorthents—VIIw, nonirrigated
Range site: Typic Torriorthents—none; Aquic Torriorthents—none; Inclusion 1—027XY016NV; Inclusion 2—none

940—Hawsley association

Map Unit Setting

Position on landscape: Sand sheets and sand dunes

Composition

Major components:
• Hawsley fine sand, 2 to 8 percent slopes—45 percent
• Hawsley fine sand, 2 to 8 percent slopes, dry—40 percent
Contrasting inclusions:
• Inclusion 1: Toulon gravelly sandy loam, 0 to 8 percent slopes—5 percent
• Inclusion 2: Isolde fine sand, 4 to 15 percent slopes—4 percent
• Inclusion 3: Typic Torriorthents gravelly loamy sand, 4 to 15 percent slopes—3 percent
• Inclusion 4: Trocken gravelly sandy loam, 0 to 4 percent slopes—3 percent

Characteristics of the Hawsley Soil

Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets and sand dunes superimposed on fan skirts and lake plain terraces
Parent material: Mixed alluvium and water-reworked eolian deposits
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Black greasewood, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 6 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 6 to 35 inches
Texture: Stratified fine sand and sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline or strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 35 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.6 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Dry Hawsley Soil

Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets and sand dunes superimposed on fan skirts and lake plain terraces
Parent material: Mixed alluvium and water-reworked eolian deposits
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 6 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 6 to 35 inches
Texture: Stratified fine sand and sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline or strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 35 to 60 inches
Texture: Fine sand

Structure: Single grained
Consistence: Loose
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.6 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Camborthids, sandy-skeletal, mixed, mesic
Position on landscape: Offshore bars adjacent to sand sheets
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes
Distinctive present vegetation: Black greasewood, Indian ricegrass
Inclusion 3
Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Offshore bars adjacent to sand sheets
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass
Inclusion 4
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Inset fans adjacent to sand sheets
Distinctive present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail

Interpretive Groups

Capability classification: Hawsley soils—IVs, irrigated; VIIs, nonirrigated
Range site: Hawsley soil—027XY016NV; the dry Hawsley soil—027XY009NV; Inclusion 1—024XY002NV; Inclusion 2—027XY016NV; Inclusion 3—027XY009NV; Inclusion 4—024XY014NV

950—Cleaver-Xeric Torriorthents association

Map Unit Setting

Position on landscape: Fan piedmont remnants superimposed on lake terraces

Composition

Major components:
• Cleaver gravelly loam, 2 to 4 percent slopes—60 percent
• Xeric Torriorthents very gravelly sandy loam, 15 to 50 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Xerollic Durargids gravelly loam, 2 to 30 percent slopes—8 percent
• Inclusion 2: Veta very gravelly sandy loam, 0 to 8 percent slopes—4 percent
• Inclusion 3: Typic Haplargids gravelly sandy loam, 0 to 4 percent slopes—2 percent
• Inclusion 4: Xerollic Haplargids gravelly sandy loam, 0 to 8 percent slopes—1 percent

Characteristics of the Cleaver Soil

Classification: Typic Durargids, loamy, mixed, mesic, shallow
Position on landscape: Summits of fan piedmont remnants superimposed on lake terraces
Parent material: Mixed alluvium
Slope range: 2 to 4 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 4 inches
Texture: Gravelly loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 4 to 11 inches
Texture: Gravelly clay loam
Structure: Subangular blocky

Consistence: Hard, friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 11 to 30 inches
Texture: Indurated hardpan

Depth: 30 to 60 inches
Texture: Very gravelly coarse sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 10 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.1 to 2.2 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Xeric Torriorthents

Classification: Xeric Torriorthents
Position on landscape: Slightly concave back slopes of lake terrace remnants
Parent material: Mixed alluvium and lacustrine material
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 35 percent

Depth: 0 to 10 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 40 inches
Texture: Stratified very gravelly loamy sand to sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 40 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 60 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.6 to 9.0 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.10; T value—2; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Durargids, loamy-skeletal, mixed, mesic
Position on landscape: Summits and slightly convex shoulders of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 2
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Stream terraces
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Inclusion 3
Classification: Typic Haplargids, fine, montmorillonitic, mesic
Position on landscape: The slightly convex, lower fan piedmont remnants
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 4

Classification: Xerollic Haplargids, fine, montmorillonitic, mesic
Position on landscape: Slightly concave foot slopes of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Cleaver soil and Xeric Torriorthents—VIIs, nonirrigated
Range site: Cleaver soil—024XY002NV; Xeric Torriorthents—none; Inclusion 1—023XY006NV; Inclusion 2—023XY038NV; Inclusion 3—024XY002NV; Inclusion 4—023XY038NV

972—Isolde-Toulon complex, 2 to 15 percent slopes

Map Unit Setting

Position on landscape: Sand dunes superimposed on beach terraces

Composition

Major components:
• Isolde fine sand, 2 to 15 percent slopes—55 percent
• Toulon very gravelly fine sandy loam, 2 to 8 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Bluewing very gravelly loamy sand, 2 to 8 percent slopes—6 percent
• Inclusion 2: Typic Torriorthents sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 3: Playas—4 percent

Characteristics of the Isolde Soil

Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on beach terraces
Parent material: Sandy eolian material derived from mixed rocks
Slope range: 2 to 15 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Hairy horsebrush, littleleaf horsebrush, Indian ricegrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 6 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 6 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.6 to 5.4 inches
Water-supplying capacity: 5 to 8 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Toulon Soil

Classification: Typic Camborthids, sandy-skeletal, mixed, mesic
Position on landscape: Beach terraces
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 10 inches
Texture: Very gravelly fine sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 10 to 20 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 20 to 60 inches
Texture: Extremely cobbly coarse sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 2.4 to 4.2 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Alluvial fans and inset fans adjacent to beach terraces
Distinctive present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torriorthents, sandy, mixed, mesic
Position on landscape: Alluvial fans adjacent to the lowest beach terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Position on landscape: Basin floors adjacent to the lowest beach terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Isolde and Toulon soils—IVs, irrigated; VIIs, nonirrigated
Range site: Isolde soil—027XY023NV; Toulon soil—027XY018NV; Inclusion 1—027XY018NV; Inclusion 2—027XY013NV; Inclusion 3—none

1043—Bluewing-Trocken association

Map Unit Setting

Position on landscape: Alluvial fans

Composition

Major components:
• Bluewing very gravelly loamy sand, 2 to 4 percent slopes—50 percent
• Trocken gravelly sandy loam, 0 to 2 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Juva gravelly loam, 0 to 2 percent slopes—5 percent
• Inclusion 2: Xeric Torriorthents very gravelly loam, 0 to 4 percent slopes—5 percent

Characteristics of the Bluewing Soil

Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Drainageways on fans
Parent material: Mixed alluvium
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Littleleaf horsebrush, rubber rabbitbrush, spiny hopsage, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 35 percent

Depth: 0 to 7 inches
Texture: Very gravelly loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: 0 to 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 7 to 60 inches
Texture: Stratified very gravelly sand and extremely gravelly sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Flooding: Frequency—occasional; duration—very brief; months—July through September
Permeability: Very rapid
Available water capacity: 2.4 to 3.7 inches
Water-supplying capacity: 5 to 8 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.05; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Alluvial fans
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 3.0 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torrifluvents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Fan skirts adjacent to the lower alluvial fans
Distinctive present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Xeric Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Drainageways on fans
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage

Interpretive Groups

Capability classification: Bluewing and Trocken soils—VIIs, nonirrigated
Range site: Bluewing soil—027XY022NV; Trocken soil—027XY018NV; Inclusion 1—027XY018NV; Inclusion 2—027XY029NV

1060—Trocken-Mazuma association

Map Unit Setting

Position on landscape: Alluvial fans, lake plain terraces, and fan skirts

Composition

Major components:
• Trocken very gravelly sandy loam, 2 to 8 percent slopes—60 percent
• Mazuma fine sandy loam, 0 to 2 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Ganaflan gravelly loam, 0 to 4 percent slopes—9 percent
• Inclusion 2: Xeric Torriorthents very gravelly loam, 2 to 8 percent slopes—6 percent

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Alluvial fans and lake plain terraces
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 40 percent

Depth: 0 to 3 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 2.4 to 3.6 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.10; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Fan skirts and lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic

Position on landscape: Fan aprons and lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2

Classification: Xeric Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Inset fans cut into lake plain terraces
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Trocken and Mazuma soils—VIIs, nonirrigated
Range site: Trocken soil—024XY002NV; Mazuma soil—024XY003NV; Inclusion 1—024XY002NV; Inclusion 2—027XY008NV

1061—Trocken-Bluewing association

Map Unit Setting

Position on landscape: Fan piedmonts

Composition

Major components:
• Trocken very gravelly sandy loam, 2 to 4 percent slopes—45 percent
• Bluewing stony loamy sand, 2 to 8 percent slopes—40 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents sandy loam, 0 to 2 percent slopes—7 percent
• Inclusion 2: Mazuma fine sandy loam, 0 to 2 percent slopes—5 percent
• Inclusion 3: Isolde fine sand, 8 to 15 percent slopes—2 percent
• Inclusion 4: Xeric Torriorthents very gravelly loamy sand, 2 to 8 percent slopes—1 percent

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Summits of fan piedmont remnants
Parent material: Mixed alluvium
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 40 percent

Depth: 0 to 3 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 2.4 to 3.6 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.10; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Bluewing Soil

Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Inset fans
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 35 percent

Depth: 0 to 7 inches
Texture: Stony loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: 0 to 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 7 to 60 inches
Texture: Stratified very gravelly coarse sand to extremely gravelly sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Very rapid
Available water capacity: 2.4 to 3.7 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.10; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Inset fans
Distinctive present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Fan skirts
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush
Inclusion 3
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on fan piedmonts
Distinctive present vegetation: Black greasewood, Indian ricegrass
Inclusion 4
Classification: Xeric Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Channels
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage

Interpretive Groups

Capability classification: Trocken and Bluewing soils—VIIs, nonirrigated
Range site: Trocken soil—027XY013NV; Bluewing soil—027XY013NV; Inclusion 1—027XY018NV; Inclusion 2—024XY003NV; Inclusion 3—027XY016NV; Inclusion 4—027XY029NV

1063—Trocken-Ganaflan-Bluewing association, dry

Map Unit Setting

Position on landscape: Fan aprons, fan collars, and lake plain terraces

Composition

Major components:
• Trocken very gravelly sandy loam, 4 to 15 percent slopes—35 percent
• Ganaflan gravelly loam, 4 to 15 percent slopes—30 percent
• Bluewing very gravelly loamy sand, 4 to 15 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Veta stony sandy loam, 4 to 15 percent slopes—7 percent
• Inclusion 2: Smaug very fine sandy loam, 4 to 15 percent slopes—4 percent
• Inclusion 3: Ruhe gravelly loamy sand, 4 to 15 percent slopes—3 percent
• Inclusion 4: Rock outcrop—1 percent

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Fan collars, fan aprons, and lake plain terraces
Parent material: Mixed alluvium
Slope range: 4 to 15 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 40 percent

Depth: 0 to 3 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 2.4 to 3.6 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.10; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Ganaflan Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Mixed lacustrine sediments and residuum derived from tufa
Slope range: 4 to 15 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 30 percent

Depth: 0 to 4 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR less than 13

Depth: 4 to 32 inches
Texture: Gravelly loam
Structure: Massive
Consistence: Hard, friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR less than 13

Depth: 32 to 48 inches
Texture: Unweathered bedrock

Depth: 48 to 60 inches
Texture: Stratified sand and gravelly sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 2.5 to 3.5 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Characteristics of the Bluewing Soil

Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Fan aprons and fan collars
Parent material: Mixed alluvium
Slope range: 4 to 15 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 35 percent

Depth: 0 to 7 inches
Texture: Very gravelly loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: 0 to 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 7 to 60 inches
Texture: Stratified very gravelly coarse sand to extremely gravelly sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Very rapid
Available water capacity: 2.4 to 3.7 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.10; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: The upper fan collars
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Classification: Typic Torripsamments, mixed, mesic, shallow
Position on landscape: Lake plain terraces adjacent to tufa outcrops
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass
Inclusion 4
Position on landscape: Lake plain terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Trocken, Ganaflan, and Bluewing soils—VIIs, nonirrigated
Range site: Trocken soil—027XY018NV; Ganaflan soil—027XY018NV; Bluewing soil—027XY018NV; Inclusion 1—023XY038NV; Inclusion 2—024XY004NV; Inclusion 3—027XY009NV; Inclusion 4—none

1064—Trocken, stony-Mazuma association

Map Unit Setting

Position on landscape: Fan remnants, fan collars, fan aprons, and lake plain terraces

Composition

Major components:
• Trocken very stony sandy loam, 2 to 8 percent slopes—35 percent
• Trocken gravelly fine sandy loam, 2 to 8 percent slopes—30 percent
• Mazuma silt loam, 2 to 4 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Veta very stony coarse sandy loam, 4 to 15 percent slopes—7 percent
• Inclusion 2: Bluewing very stony sand, 4 to 15 percent slopes—5 percent
• Inclusion 3: Typic Torriorthents gravelly sandy loam, 15 to 50 percent slopes—3 percent

Characteristics of the Very Stony Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Fan collars and fan aprons
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 3.0 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Gravelly Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Alluvial fan remnants and lake plain terraces
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Gravelly fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 2.4 to 3.6 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam

Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Fan collars
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Fan collars and fan aprons
Distinctive present vegetation: Littleleaf horsebrush, rubber rabbitbrush, spiny hopsage, Indian ricegrass
Inclusion 3
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Eroded lake plain terraces
Distinctive present vegetation: Shadscale, desert needlegrass

Interpretive Groups

Capability classification: Trocken and Mazuma soils—VIIs, nonirrigated
Range site: Trocken soils—024XY002NV; Mazuma soil—024XY003NV; Inclusion 1—023XY038NV; Inclusion 2—027XY022NV; Inclusion 3—027XY027NV

1065—Trocken-Ruhe-Bluewing association

Map Unit Setting

Position on landscape: Beach terraces, alluvial fans, and inset fans

Composition

Major components:
• Trocken very stony sandy loam, 4 to 15 percent slopes—40 percent
• Ruhe very stony loamy sand, 4 to 15 percent slopes—30 percent
• Bluewing very stony sandy loam, 4 to 15 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Isolde fine sand, 2 to 8 percent slopes—8 percent
• Inclusion 2: Hawsley loamy sand, 2 to 8 percent slopes—7 percent

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Beach terraces and alluvial fans
Parent material: Mixed alluvium
Slope range: 4 to 15 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Soft, very friable

Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 3.0 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Ruhe Soil

Classification: Typic Torripsamments, mixed, mesic, shallow
Position on landscape: Beach terraces
Parent material: Mixed sandy alluvium
Slope range: 4 to 15 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 15 percent

Depth: 0 to 2 inches
Texture: Very stony loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Strongly alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 2 to 16 inches
Texture: Loamy sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 16 to 30 inches
Texture: Unweathered bedrock

Depth: 30 to 60 inches
Texture: Extremely gravelly sand
Structure: Single grained
Consistence: Loose
Reaction: Very strongly alkaline
Salinity: 4 to 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Rapid
Available water capacity: 0.7 to 1.0 inch
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Bluewing Soil

Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Inset fans
Parent material: Mixed alluvium
Slope range: 4 to 15 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 35 percent

Depth: 0 to 7 inches
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 7 to 60 inches
Texture: Stratified very gravelly coarse sand to extremely gravelly sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Very rapid
Available water capacity: 2.4 to 3.7 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.05; T value—5; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on beach terraces and alluvial fans
Distinctive present vegetation: Hairy horsebrush, littleleaf horsebrush, Indian ricegrass
Inclusion 2
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on alluvial fans
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Interpretive Groups

Capability classification: Trocken, Ruhe, and Bluewing soils—VIIs, nonirrigated
Range site: Trocken soil—027XY013NV; Ruhe soil—027XY009NV; Bluewing soil—027XY018NV; Inclusion 1—027XY023NV; Inclusion 2—027XY009NV

1067—Trocken, moist-Mazuma association

Map Unit Setting

Position on landscape: Fan skirts and lake plain terraces

Composition

Major components:
• Trocken gravelly fine sandy loam, 0 to 4 percent slopes—65 percent
• Mazuma fine sandy loam, 0 to 2 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Hawsley loamy fine sand, 2 to 15 percent slopes—5 percent
• Inclusion 2: Typic Torriorthents sandy loam, 0 to 4 percent slopes—5 percent
• Inclusion 3: Bluewing cobbly loamy sand, 2 to 4 percent slopes—5 percent

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Fan skirts
Parent material: Mixed alluvium
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Gravelly fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 2.4 to 3.6 inches

Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The lower fan skirts and lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass
Inclusion 2
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Fan skirts
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Channels and fan aprons
Distinctive present vegetation: Littleleaf horsebrush, rubber rabbitbrush, spiny hopsage, Indian ricegrass

Interpretive Groups

Capability classification: Trocken and Mazuma soils—VIIs, nonirrigated
Range site: Trocken soil—024XY014NV; Mazuma soil—024XY003NV; Inclusion 1—027XY009NV; Inclusion 2—024XY004NV; Inclusion 3—027XY022NV

1068—Trocken-Hawsley association

Map Unit Setting

Position on landscape: Fan piedmont remnants and sand sheets

Composition

Major components:
• Trocken gravelly fine sandy loam, 0 to 4 percent slopes—50 percent
• Hawsley fine sand, 0 to 4 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Toulon very gravelly fine sandy loam, 0 to 8 percent slopes—9 percent
• Inclusion 2: Bluewing very stony loamy sand, 4 to 8 percent slopes—6 percent

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Summits of fan piedmont remnants
Parent material: Mixed alluvium
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Gravelly fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 2.4 to 3.6 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Hawsley Soil

Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on fan piedmont remnants
Parent material: Mixed alluvium and water-reworked eolian deposits
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 8 to 42 inches
Texture: Stratified fine sand and sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline or strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 42 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.6 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Camborthids, sandy-skeletal, mixed, mesic
Position on landscape: Offshore bars
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Fan collars and fan aprons
Distinctive present vegetation: Littleleaf horsebrush, rubber rabbitbrush, spiny hopsage, Indian ricegrass

Interpretive Groups

Capability classification: Hawsley soil—IVs, irrigated; Trocken and Hawsley soils—VIIs, irrigated
Range site: Trocken soil—024XY014NV; Hawsley soil—027XY009NV; Inclusion 1—024XY002NV; Inclusion 2—027XY022NV

1160—Glenbrook-Graufels-Rock outcrop association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Glenbrook gravelly loamy coarse sand, 30 to 50 percent slopes—40 percent
• Graufels gravelly loamy coarse sand, 30 to 50 percent slopes—30 percent
• Rock outcrop—20 percent
Contrasting inclusions:
• Inclusion 1: Xerollic Haplargids gravelly sandy loam, 8 to 50 percent slopes—7 percent
• Inclusion 2: Xeric Torriorthents gravelly sandy loam, 2 to 8 percent slopes—3 percent

Characteristics of the Glenbrook Soil

Classification: Xeric Torripsamments, mixed, mesic, shallow
Position on landscape: Shoulders and south- and west-facing back slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 30 to 50 percent
Elevation: 5,000 to 7,100 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 30 percent

Depth: 0 to 9 inches
Texture: Gravelly loamy coarse sand
Structure: Single grained
Consistence: Loose
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 9 to 15 inches
Texture: Gravelly loamy coarse sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Rapid
Available water capacity: 0.6 to 1.2 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—3
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Graufels Soil

Classification: Torripsammentic Haploxerolls, sandy, mixed, mesic
Position on landscape: North- and east-facing back slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 30 to 50 percent
Elevation: 5,000 to 7,100 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches

Average annual air temperature: About 47 degrees F
Frost-free period: About 90 days

Typical Profile

Surface cover: Pebbles, 15 percent

Depth: 0 to 10 inches
Texture: Gravelly loamy coarse sand
Structure: Single grained
Consistence: Loose
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 22 inches
Texture: Gravelly loamy coarse sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 22 to 40 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Rapid
Available water capacity: 1.5 to 3.0 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.10; T value—2; wind erodibility group—3
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Rock Outcrop

Position on landscape: Summits and side slopes of mountains
Kind of rock: Granite

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic, shallow
Position on landscape: Crests and shoulders of mountains
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Inclusion 2
Classification: Xeric Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Stream terraces
Distinctive present vegetation: Basin big sagebrush, rubber rabbitbrush, basin wildrye

Interpretive Groups

Capability classification: Glenbrook soil—VIIe, Graufels soil—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Glenbrook soil—023XY039NV; Graufels soil—023XY039NV; Rock outcrop—none; Inclusion 1—023XY037NV; Inclusion 2—026XY034NV

1190—Ragtown-Isolde complex, 0 to 15 percent slopes

Map Unit Setting

Position on landscape: Lake plain terraces and dunes

Composition

Major components:
• Ragtown silty clay loam, 0 to 2 percent slopes—65 percent
• Isolde fine sand, 4 to 15 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents silt loam, 0 to 2 percent slopes—9 percent
• Inclusion 2: Typic Torriorthents loamy fine sand, 4 to 8 percent slopes—6 percent

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline

Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Isolde Soil

Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes
Parent material: Sandy eolian material derived from mixed rocks
Slope range: 4 to 15 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Black greasewood, Indian ricegrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 4 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 4 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.6 to 5.4 inches
Water-supplying capacity: 5 to 8 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, fine-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Black greasewood, seepweed, shadscale
Inclusion 2
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Toe slopes of dunes
Distinctive present vegetation: Black greasewood, Indian ricegrass

Interpretive Groups

Capability classification: Isolde soil—IVs, irrigated; Ragtown and Isolde soils—VIIs, nonirrigated
Range site: Ragtown soil—027XY025NV; Isolde soil—027XY016NV; Inclusion 1—027XY025NV; Inclusion 2—027XY016NV

1191—Ragtown association

Map Unit Setting

Position on landscape: Lake plain terrace remnants

Composition

Major components:
- Ragtown clay loam, 0 to 2 percent slopes—60 percent
- Ragtown clay loam, moist, 0 to 2 percent slopes—25 percent

Contrasting inclusions:
- Inclusion 1: Playas—9 percent
- Inclusion 2: Isolde fine sand, 2 to 15 percent slopes—5 percent
- Inclusion 3: Badland—1 percent

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Smooth or slightly convex lake plain terrace remnants
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Moist Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Slightly concave to convex, dissected lake plain terrace remnants
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive

Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: The lowest part of lake plain terraces
Distinctive present vegetation: None
Inclusion 2
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Black greasewood, Indian ricegrass
Inclusion 3
Position on landscape: Eroded lake plain terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Ragtown soils—VIIs, nonirrigated
Range site: Ragtown soil—027XY025NV; the moist Ragtown soil—024XY003NV; Inclusion 1—none; Inclusion 2—027XY016NV; Inclusion 3—none

1192—Ragtown-Umberland association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Ragtown fine sandy loam, 2 to 4 percent slopes—50 percent
• Umberland silty clay loam, 0 to 2 percent slopes—25 percent
• Ragtown fine sandy loam, dry, 2 to 4 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents loam, 2 to 4 percent slopes—9 percent
• Inclusion 2: Badland—1 percent

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Smooth or slightly convex lake plain terraces
Parent material: Lacustrine sediments
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches

Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: C
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: Slightly concave lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Torrey quailbush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 15 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 15 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Characteristics of the Dry Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Convex, eroded lake plain terraces at the lower elevations
Parent material: Lacustrine sediments
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: C

Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, fine, montmorillonitic, (calcareous), mesic
Position on landscape: Broad, concave drainageways adjacent to eroded lake plain terrace remnants
Distinctive present vegetation: Black greasewood, sagebrush, basin wildrye
Inclusion 2
Position on landscape: Eroded lake plain terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Ragtown soils—VIIs, nonirrigated; Umberland soil—VIIw, nonirrigated
Range site: Ragtown soil—024XY002NV; Umberland soil—024XY015NV; the dry Ragtown soil—024XY003NV; Inclusion 1—024XY022NV; Inclusion 2—none

1194—Ragtown-Swingler-Benin association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Ragtown silty clay loam, 0 to 2 percent slopes—40 percent
• Swingler fine sandy loam, 0 to 4 percent slopes—30 percent
• Benin silty clay loam, 0 to 2 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Haybourne sandy loam, 2 to 4 percent slopes—6 percent
• Inclusion 2: Ragtown silt loam, 0 to 2 percent slopes—5 percent
• Inclusion 3: Vertic Camborthids silty clay, 4 to 8 percent slopes—4 percent

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The middle lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Swingler Soil

Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: The upper lake plain terraces
Parent material: Mixed alluvium over lacustrine sediments
Slope range: 0 to 4 percent

Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 6 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 6 to 60 inches
Texture: Stratified very fine sandy loam and silt loam
Structure: Massive
Consistence: Slightly hard, friable
Reaction: Very strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 8.4 to 10.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Characteristics of the Benin Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,100 feet
Dominant present vegetation: Torrey quailbush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 1 inch
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 1 to 60 inches
Texture: Silty clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, very firm
Reaction: Moderately alkaline or strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 23 to 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Flooding: Frequency—occasional; duration—very brief; months—November through June
Permeability: Very slow
Available water capacity: 9.0 to 9.8 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Alluvial fans
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 2
Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The middle lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 3
Classification: Vertic Camborthids, fine, montmorillonitic, mesic
Position on landscape: The middle lake plain terraces

Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Swingler soil—IIe, irrigated; Ragtown soil—VIIs, Swingler soil—VIIc, Benin soil—VIIw, nonirrigated
Range site: Ragtown soil—024XY002NV; Swingler soil—024XY003NV; Benin soil—024XY015NV; Inclusion 1—023XY006NV; Inclusion 2—024XY002NV; Inclusion 3—024XY002NV

1200—Dosie-Devada association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Dosie extremely stony loam, 15 to 50 percent slopes—60 percent
• Devada very stony loam, 4 to 15 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Softscrabble stony loam, 15 to 50 percent slopes—6 percent
• Inclusion 2: Rubble land—4 percent
• Inclusion 3: Lithic Argixerolls extremely stony loam, 4 to 15 percent slopes—3 percent
• Inclusion 4: Rock outcrop—2 percent

Characteristics of the Dosie Soil

Classification: Pachic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: Side slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 5,400 to 6,800 feet
Dominant present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 30 percent; cobbles, 15 percent; pebbles, 10 percent

Depth: 0 to 5 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 41 inches
Texture: Very gravelly clay loam, very gravelly clay
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 41 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 4.0 to 5.4 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.10; T value—3; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Devada Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Toe slopes and crests of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 15 percent
Elevation: 5,400 to 6,800 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 15 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Very stony loam

Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 13 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 12 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.5 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing side slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass
Inclusion 2
Position on landscape: Side slopes of mountains
Distinctive present vegetation: None
Inclusion 3
Classification: Lithic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: Convex crests of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Utah juniper
Inclusion 4
Position on landscape: Mountain peaks
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Dosie and Devada soils—VIIs, irrigated
Range site: Dosie soil—023XY016NV; Devada soil—023XY031NV; Inclusion 1—023XY007NV; Inclusion 2—none; Inclusion 3—023XY035NV; Inclusion 4—none

1201—Dosie-Rubble land association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Dosie extremely stony loam, 15 to 50 percent slopes—65 percent
• Rubble land—25 percent
Contrasting inclusions:
• Inclusion 1: Lithic Xerollic Camborthids extremely stony clay, 2 to 15 percent slopes—4 percent
• Inclusion 2: Softscrabble very stony loam, 15 to 50 percent slopes—3 percent
• Inclusion 3: Pickup extremely stony clay loam, 30 to 50 percent slopes—3 percent

Characteristics of the Dosie Soil

Classification: Pachic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: Side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 5,200 to 6,200 feet
Dominant present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 30 percent; cobbles, 15 percent; pebbles, 10 percent

Depth: 0 to 5 inches
Texture: Extremely stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 41 inches
Texture: Very gravelly clay loam, very gravelly clay
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 41 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 4.0 to 5.4 inches
Water-supplying capacity: 11 to 13 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.10; T value—3; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Rubble Land

Surface cover: Stones, boulders, and cobbles, 90 to 100 percent
Position on landscape: Side slopes of plateaus

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Camborthids, clayey, montmorillonitic, mesic
Position on landscape: Summits of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Utah juniper
Inclusion 2
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-facing back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye
Inclusion 3
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: The lower, south-facing side slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Interpretive Groups

Capability classification: Dosie soil—VIIs, nonirrigated; Rubble land—VIIIs
Range site: Dosie soil—023XY016NV; Rubble land—none; Inclusion 1—023XY035NV; Inclusion 2—023XY041NV; Inclusion 3—023XY037NV

1220—Ceejay-Pickup association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Ceejay very stony loam, 4 to 30 percent slopes—65 percent
• Pickup very stony loam, 15 to 50 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Manogue extremely stony clay loam, 0 to 4 percent slopes—6 percent
• Inclusion 2: Reywat very stony loam, 15 to 50 percent slopes—5 percent
• Inclusion 3: Rock outcrop—2 percent
• Inclusion 4: Oppio very stony clay loam, 15 to 50 percent slopes—2 percent

Characteristics of the Ceejay Soil

Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Summits, back slopes, and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 40 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 16 inches
Texture: Cobbly clay, cobbly clay loam
Structure: Prismatic parting to angular blocky
Consistence: Hard, friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Pickup Soil

Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North- and east-facing back slopes of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,700 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 34 inches
Texture: Very gravelly clay
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.2 to 4.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Concave summits of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 2
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: The higher, north-facing back slopes of plateaus
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 3
Position on landscape: Rims of plateaus
Distinctive present vegetation: None

Inclusion 4
Classification: Xerollic Haplargids, fine, montmorillonitic, mesic
Position on landscape: South- and west-facing side slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability classification: Ceejay and Pickup soils—VIIs, nonirrigated
Range site: Ceejay soil—023XY047NV; Pickup soil—023XY037NV; Inclusion 1—023XY047NV; Inclusion 2—023XY039NV; Inclusion 3—none; Inclusion 4—023XY047NV

1221—Ceejay stony loam, 4 to 30 percent slopes

Map Unit Setting

Position on landscape: Shoulders and back slopes of hills

Composition

Major component:
• Ceejay stony loam, 4 to 30 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Oppio very stony clay loam, 30 to 50 percent slopes—5 percent
• Inclusion 2: Bombadil stony loam, 4 to 30 percent slopes—4 percent
• Inclusion 3: Theon stony loam, 4 to 15 percent slopes—3 percent
• Inclusion 4: Rock outcrop—3 percent

Characteristics of the Ceejay Soil

Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Shoulders and back slopes of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,400 to 5,200 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 2 inches
Texture: Stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 16 inches
Texture: Cobbly clay, cobbly clay loam
Structure: Prismatic parting to angular blocky
Consistence: Hard, friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Haplargids, fine, montmorillonitic, mesic
Position on landscape: South-facing back slopes of hills
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Shoulders and back slopes of hills
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 3
Classification: Lithic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: The lower areas on crests of hills
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 4
Position on landscape: Crests and side slopes of hills
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Ceejay soil—VIIs, nonirrigated
Range site: Ceejay soil—023XY047NV; Inclusion 1—023XY047NV; Inclusion 2—023XY006NV; Inclusion 3—027XY013NV; Inclusion 4—none

1222—Ceejay-Verdico-Chalco association

Map Unit Setting

Position on landscape: Hills

Composition

Major components:
• Ceejay stony loam, 4 to 15 percent slopes—40 percent
• Verdico extremely stony sandy loam, 8 to 30 percent slopes—30 percent
• Chalco very stony loam, 8 to 30 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Haplic Durargids very gravelly clay loam, 4 to 15 percent slopes—6 percent
• Inclusion 2: Oppio very stony clay loam, 30 to 50 percent slopes—6 percent
• Inclusion 3: Rock outcrop—3 percent

Characteristics of the Ceejay Soil

Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Crests and shoulders of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 15 percent
Elevation: 4,400 to 4,800 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 2 inches
Texture: Stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 16 inches
Texture: Cobbly clay, cobbly clay loam
Structure: Prismatic parting to angular blocky
Consistence: Hard, friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Verdico Soil

Classification: Xerollic Paleargids, fine, montmorillonitic, mesic
Position on landscape: Smooth or concave back slopes of hills
Parent material: Residuum and colluvium derived from tuff
Slope range: 8 to 30 percent
Elevation: 4,400 to 4,800 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 15 percent; cobbles, 10 percent; pebbles, 10 percent

Depth: 0 to 2 inches
Texture: Extremely stony sandy loam
Structure: Platy
Consistence: Slightly hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 22 inches
Texture: Clay
Structure: Prismatic
Consistence: Extremely hard, very firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 22 to 29 inches
Texture: Gravelly clay
Structure: Massive
Consistence: Very hard, very firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 29 to 60 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 3.0 to 6.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Chalco Soil

Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Smooth or slightly convex back slopes of hills
Parent material: Residuum and colluvium derived from tuff
Slope range: 8 to 30 percent
Elevation: 4,400 to 4,800 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 8 percent; cobbles, 8 percent; pebbles, 35 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 15 inches
Texture: Clay
Structure: Angular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 1.3 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Haplic Durargids, fine, montmorillonitic, mesic
Position on landscape: The lower, convex side slopes of hills
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Xerollic Haplargids, fine, montmorillonitic, mesic
Position on landscape: Back slopes of hills
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 3
Position on landscape: Crests and side slopes of hills
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Ceejay, Verdico, and Chalco soils—VIIs, nonirrigated
Range site: Ceejay soil—023XY047NV; Verdico soil—023XY047NV; Chalco soil—023XY047NV; Inclusion 1—024XY002NV; Inclusion 2—023XY047NV; Inclusion 3—none

1230—Singatse-Jaybee association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Singatse very gravelly sandy loam, 15 to 50 percent slopes—65 percent
• Jaybee very gravelly sandy loam, 15 to 50 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—9 percent
• Inclusion 2: Lithic Xeric Torriorthents very gravelly sandy loam, 15 to 50 percent slopes—6 percent

Characteristics of the Singatse Soil

Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: South-, east-, and west-facing side slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,300 to 5,000 feet
Dominant present vegetation: Shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 1 inch
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 1 to 6 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 6 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 10 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.3 to 0.6 inch
Water-supplying capacity: 3 to 5 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: North-facing side slopes of mountains
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,300 to 5,000 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic

Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None
Inclusion 2
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Convex, eroded side slopes of mountains
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability classification: Singatse and Jaybee soils—VIIs, nonirrigated
Range site: Singatse soil—027XY027NV; Jaybee soil—023XY047NV; Inclusion 1—none; Inclusion 2—023XY047NV

1240—Labkey-Mazuma association

Map Unit Setting

Position on landscape: Barrier bars and lagoons

Composition

Major components:
• Labkey gravelly sandy loam, 2 to 8 percent slopes—55 percent
• Mazuma fine sandy loam, 0 to 4 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Ragtown very fine sandy loam, 0 to 2 percent slopes—5 percent
• Inclusion 2: Typic Torriorthents very fine sandy loam, 0 to 2 percent slopes—5 percent
• Inclusion 3: Hawsley loamy fine sand, 2 to 8 percent slopes—3 percent
• Inclusion 4: Typic Torriorthents sandy loam, 0 to 2 percent slopes—2 percent

Characteristics of the Labkey Soil

Classification: Typic Camborthids, sandy-skeletal, mixed, mesic
Position on landscape: Barrier bars
Parent material: Granitic alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,300 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 4 to 14 inches
Texture: Gravelly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 14 to 60 inches
Texture: Stratified gravelly coarse sand and very gravelly coarse sand
Structure: Single grained or massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 2.2 to 4.0 inches
Water-supplying capacity: 4 to 6 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lagoons
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,300 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Black greasewood, seepweed, shadscale
Inclusion 2
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Bottom of lagoons
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on lagoons and barrier bars
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass
Inclusion 4
Classification: Typic Torriorthents
Position on landscape: The lower beach terraces adjacent to barrier bars
Distinctive present vegetation: Black greasewood

Interpretive Groups

Capability classification: Labkey soil—IVs, Mazuma soil—IIe, irrigated; Labkey soil—VIIs, Mazuma soil—VIIc, nonirrigated
Range site: Labkey soil—027XY018NV; Mazuma soil—024XY002NV; Inclusion 1—027XY025NV; Inclusion 2—027XY013NV; Inclusion 3—027XY009NV; Inclusion 4—none

1250—Jerval-Dorper association

Map Unit Setting

Position on landscape: Fan piedmont remnants

Composition

Major components:
• Jerval gravelly very fine sandy loam, 2 to 8 percent slopes—50 percent

• Dorper stony very fine sandy loam, 2 to 8 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Typic Camborthids gravelly fine sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Typic Natrargids sandy loam, 4 to 30 percent slopes—5 percent
• Inclusion 3: Xeric Torriorthents gravelly sandy loam, 2 to 8 percent slopes—5 percent

Characteristics of the Jerval Soil

Classification: Duric Natrargids, fine-loamy, mixed, mesic
Position on landscape: The lower areas on summits of fan piedmont remnants
Parent material: Mixed alluvium influenced by loess
Slope range: 2 to 8 percent
Elevation: 4,700 to 4,900 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 10 inches
Texture: Gravelly very fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 10 to 20 inches
Texture: Gravelly clay loam
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 30

Depth: 20 to 60 inches
Texture: Very gravelly sandy loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 5.1 to 5.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.17; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Dorper Soil

Classification: Duric Natrargids, fine, montmorillonitic, mesic
Position on landscape: The higher areas on summits of fan piedmont remnants
Parent material: Mixed alluvium influenced by loess and volcanic ash
Slope range: 2 to 8 percent
Elevation: 4,700 to 4,900 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Stones and boulders, 1 percent; pebbles, 20 percent

Depth: 0 to 2 inches
Texture: Stony very fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 2 to 6 inches
Texture: Very fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 6 to 14 inches
Texture: Clay loam
Structure: Prismatic
Consistence: Very hard, firm
Reaction: Moderately alkaline or strongly alkaline

Salinity: 2 to 8 mmhos per cm
Sodicity: SAR 13 to 40

Depth: 14 to 60 inches
Texture: Very gravelly sandy loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 4.0 to 5.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Inset fans
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Typic Natrargids, fine, montmorillonitic, mesic
Position on landscape: The higher areas on summits and shoulders of fan piedmont remnants
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Classification: Xeric Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Inset fans
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Jerval soil—IIIe, Dorper soil—IVs, irrigated; Jerval and Dorper soils—VIIs, nonirrigated
Range site: Jerval soil—027XY013NV; Dorper soil—027XY013NV; Inclusion 1—027XY013NV; Inclusion 2—027XY013NV; Inclusion 3—027XY008NV

1251—Jerval-Kumiva association

Map Unit Setting

Position on landscape: Fan piedmonts

Composition

Major components:
• Jerval loam, 2 to 8 percent slopes—45 percent
• Jerval loam, 8 to 30 percent slopes—20 percent
• Kumiva sandy loam, 2 to 8 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Typic Camborthids fine sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Xerollic Camborthids gravelly loamy fine sand, 2 to 8 percent slopes—5 percent
• Inclusion 3: Kumiva silt loam, 4 to 8 percent slopes—3 percent
• Inclusion 4: Xerollic Camborthids gravelly sandy loam, 15 to 30 percent slopes—2 percent

Characteristics of the Jerval Soil, 2 to 8 Percent Slopes

Classification: Duric Natrargids, fine-loamy, mixed, mesic
Position on landscape: Summits and the upper side slopes of fan piedmont remnants
Parent material: Mixed alluvium influenced by loess
Slope range: 2 to 8 percent
Elevation: 4,400 to 4,800 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 10 to 20 inches
Texture: Gravelly clay loam
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 30

Depth: 20 to 60 inches
Texture: Very gravelly sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 5.1 to 5.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Jerval Soil, 8 to 30 Percent Slopes

Classification: Duric Natrargids, fine-loamy, mixed, mesic
Position on landscape: Smooth to concave side slopes of fan piedmont remnants
Parent material: Mixed alluvium influenced by loess
Slope range: 8 to 30 percent
Elevation: 4,400 to 4,800 feet
Dominant present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 10 to 20 inches
Texture: Gravelly clay loam
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 30

Depth: 20 to 60 inches
Texture: Very gravelly sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 5.1 to 5.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Rapid
Hydrologic group: B
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Kumiva Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Inset fans
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 4,400 to 4,800 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 8 inches
Texture: Sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 8 to 40 inches
Texture: Sandy loam

Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline or strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 40 to 60 inches
Texture: Loamy sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 7.3 to 9.1 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: The concave, upper side slopes of fan piedmont remnants
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Concave toe slopes of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 3
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Inset fans
Distinctive present vegetation: Bud sagebrush, winterfat
Inclusion 4
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Concave, north-facing back slopes of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Jerval soil, 2 to 8 percent slopes—VIIs, nonirrigated; Jerval soil, 8 to 30 percent slopes—VIIe, nonirrigated; Kumiva soil—VIIc, nonirrigated
Range site: Jerval soil, 2 to 8 percent slopes—024XY002NV; Jerval soil, 8 to 30 percent slopes—024XY014NV; Kumiva soil—024XY002NV; Inclusion 1—024XY004NV; Inclusion 2—024XY020NV; Inclusion 3—024XY004NV; Inclusion 4—023XY038NV

1254—Jerval-Trocken association

Map Unit Setting

Position on landscape: Fan piedmont remnants and fan collars

Composition

Major components:
• Jerval silt loam, 4 to 15 percent slopes—55 percent
• Trocken very stony sandy loam, 8 to 15 percent slopes—15 percent
• Jerval bouldery silt loam, 2 to 8 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents sandy loam, 4 to 30 percent slopes—8 percent
• Inclusion 2: Xeric Torriorthents coarse sandy loam, 4 to 15 percent slopes—4 percent
• Inclusion 3: Typic Natrargids silty clay loam, 15 to 30 percent slopes—2 percent
• Inclusion 4: Aeric Halaquepts silty clay loam, 4 to 15 percent slopes—1 percent

Characteristics of Jerval Silt Loam

Classification: Duric Natrargids, fine-loamy, mixed, mesic
Position on landscape: Summits and side slopes of fan piedmont remnants
Parent material: Mixed alluvium influenced by loess
Slope range: 4 to 15 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 10 to 20 inches
Texture: Gravelly clay loam
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 30

Depth: 20 to 60 inches
Texture: Very gravelly sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 5.1 to 5.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Fan collars superimposed on fan piedmont remnants
Parent material: Mixed alluvium
Slope range: 8 to 15 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 3.0 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Bouldery Jerval Soil

Classification: Duric Natrargids, fine-loamy, mixed, mesic
Position on landscape: Summits of the lower fan piedmont remnants
Parent material: Mixed alluvium influenced by loess
Slope range: 2 to 8 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; pebbles, 5 percent

Depth: 0 to 10 inches
Texture: Bouldery silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 10 to 20 inches
Texture: Gravelly clay loam
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 30

Depth: 20 to 60 inches
Texture: Very gravelly sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 5.1 to 5.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.49; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Concave toe slopes and side slopes of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Inclusion 2
Classification: Xeric Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Crests and the upper side slopes of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, basin wildrye, arrowleaf balsamroot

Inclusion 3
Classification: Typic Natrargids, fine, montmorillonitic, mesic
Position on landscape: South-facing side slopes of dissected fan piedmont remnants
Distinctive present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail

Inclusion 4
Classification: Aeric Halaquepts, fine-loamy, mixed (calcareous), mesic
Position on landscape: Fan piedmont remnants adjacent to springs and seeps
Distinctive present vegetation: Silver buffaloberry, rubber rabbitbrush, inland saltgrass

Interpretive Groups

Capability classification: Jerval silt loam—IVe, irrigated; Jerval and Trocken soils—VIIs, nonirrigated
Range site: Jerval silt loam—024XY002NV; Trocken soil—024XY002NV; the bouldery Jerval soil—024XY003NV; Inclusion 1—024XY020NV; Inclusion 2—023XY040NV; Inclusion 3—024XY014NV; Inclusion 4—024XY063NV

1255—Jerval-Veta association

Map Unit Setting

Position on landscape: Lake plain terraces, alluvial fans, and inset fans

Composition

Major components:
• Jerval gravelly very fine sandy loam, 2 to 4 percent slopes—65 percent
• Veta very gravelly sandy loam, 2 to 8 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Typic Camborthids very fine sandy loam, 0 to 4 percent slopes—5 percent
• Inclusion 2: Smaug very fine sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 3: Xerollic Haplargids very gravelly sandy loam, 2 to 8 percent slopes—5 percent

Characteristics of the Jerval Soil

Classification: Duric Natrargids, fine-loamy, mixed, mesic
Position on landscape: Lake plain terraces
Parent material: Mixed alluvium influenced by loess
Slope range: 2 to 4 percent

Elevation: 4,100 to 4,300 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 6 inches
Texture: Gravelly very fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 10 to 20 inches
Texture: Gravelly clay loam
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 30

Depth: 20 to 60 inches
Texture: Very gravelly sandy loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 5.1 to 5.9 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.17; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Veta Soil

Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Alluvial fans and inset fans
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 4,100 to 4,300 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 45 percent

Depth: 0 to 6 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 18 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 to 60 inches
Texture: Stratified extremely gravelly loamy sand to very gravelly sandy loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 3.0 to 4.0 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1

Classification: Typic Camborthids, fine-loamy, mixed, mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2

Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Inclusion 3

Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: The higher lake plain terraces and alluvial fan remnants
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Jerval soil—IIIe, Veta soil—IVs, irrigated; Jerval and Veta soils—VIIs, nonirrigated
Range site: Jerval soil—027XY018NV; Veta soil—023XY038NV; Inclusion 1—027XY018NV; Inclusion 2—024XY004NV; Inclusion 3—023XY038NV

1260—Sojur-Phliss association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Sojur extremely channery silt loam, 15 to 50 percent slopes—60 percent
• Phliss extremely channery loam, 15 to 50 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Xeric Torriorthents gravelly sandy loam, 15 to 50 percent slopes—8 percent
• Inclusion 2: Typic Torriorthents very channery loam, 15 to 50 percent slopes—5 percent
• Inclusion 3: Rock outcrop—2 percent

Characteristics of the Sojur Soil

Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: South- and west-facing side slopes of mountains
Parent material: Residuum and colluvium derived from phyllite
Slope range: 15 to 50 percent
Elevation: 4,400 to 4,800 feet
Dominant present vegetation: Shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 4 inches
Texture: Extremely channery silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 4 to 7 inches
Texture: Weathered bedrock

Depth: 7 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 10 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.2 to 0.8 inch
Water-supplying capacity: 3 to 5 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Phliss Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: North- and east-facing side slopes of mountains
Parent material: Residuum and colluvium derived from phyllite
Slope range: 15 to 50 percent
Elevation: 4,400 to 4,800 feet
Dominant present vegetation: Wyoming big sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 8 inches

Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 4 inches
Texture: Extremely channery loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 14 inches
Texture: Very channery loam
Structure: Subangular blocky
Consistence: Slightly hard, firm
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.2 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Xeric Torriorthents, loamy, mixed (calcareous), mesic, shallow
Position on landscape: North-facing side slopes of mountains
Distinctive present vegetation: Wyoming big sagebrush, Sandberg bluegrass
Inclusion 2
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic, shallow
Position on landscape: East-, south-, and west-facing side slopes of mountains
Distinctive present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass
Inclusion 3
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Sojur and Phliss soils—VIIs, nonirrigated
Range site: Sojur soil—027XY027NV; Phliss soil—027XY007NV; Inclusion 1—027XY007NV; Inclusion 2—027XY017NV; Inclusion 3—none

1270—Deadyon sandy loam, 4 to 8 percent slopes

Map Unit Setting

Position on landscape: Summits of fan piedmont remnants

Composition

Major component:
• Deadyon sandy loam, 4 to 8 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Xeric Torriorthents gravelly loamy sand, 4 to 15 percent slopes—7 percent
• Inclusion 2: Aridic Argixerolls very bouldery sandy loam, 8 to 50 percent slopes—4 percent
• Inclusion 3: Deadyon very bouldery sandy loam, 4 to 15 percent slopes—3 percent
• Inclusion 4: Lithic Xeric Torriorthents very stony sandy loam, 15 to 50 percent slopes—1 percent

Characteristics of the Deadyon Soil

Classification: Xerollic Haplargids, coarse-loamy, mixed, mesic
Position on landscape: Summits of fan piedmont remnants
Parent material: Granitic alluvium
Slope range: 4 to 8 percent
Elevation: 4,200 to 4,800 feet
Dominant present vegetation: Wyoming big sagebrush, basin wildrye, arrowleaf balsamroot

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 15 percent

Depth: 0 to 5 inches
Texture: Sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 22 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 22 to 28 inches
Texture: Sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 28 to 60 inches
Texture: Gravelly loamy sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 4.3 to 7.7 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Xeric Torriorthents, sandy, mixed, mesic
Position on landscape: Inset fans and fan collars adjacent to fan piedmont remnants
Distinctive present vegetation: Basin big sagebrush, spiny hopsage, basin wildrye

Inclusion 2
Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Pediment and hill side slopes adjacent to fan piedmont remnants
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Inclusion 3
Classification: Xerollic Haplargids, coarse-loamy, mixed, mesic
Position on landscape: Summits of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, basin wildrye, arrowleaf balsamroot

Inclusion 4
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Hills adjacent to the upper fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Deadyon soil—IIIe, irrigated; VIIc, nonirrigated
Range site: Deadyon soil—023XY040NV; Inclusion 1—024XY041NV; Inclusion 2—023XY039NV; Inclusion 3—023XY040NV; Inclusion 4—027XY008NV

1290—Hutchley-Terca association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Hutchley very gravelly loam, 30 to 50 percent slopes—50 percent
• Terca very gravelly loam, 30 to 50 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Newlands stony loam, 30 to 50 percent slopes—6 percent
• Inclusion 2: Aridic Argixerolls very gravelly loam, 30 to 50 percent slopes—4 percent
• Inclusion 3: Argic Lithic Cryoborolls very stony loam, 50 to 75 percent slopes—3 percent
• Inclusion 4: Rock outcrop—2 percent

Characteristics of the Hutchley Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: North-, east-, and west-facing back slopes of mountains

Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 5,400 to 7,000 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 12 inches
Average annual air temperature: About 44 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 6 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 15 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Terca Soil

Classification: Lithic Argixerolls, loamy, mixed, mesic
Position on landscape: South-facing back slopes and shoulders of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 5,400 to 7,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 3 inches
Texture: Very gravelly loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 17 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.3 to 1.8 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1

Classification: Argic Cryoborolls, fine-loamy, mixed
Position on landscape: North-facing, concave side slopes of mountains

Distinctive present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Inclusion 2

Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: South-facing, concave back slopes of mountains
Distinctive present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Inclusion 3

Classification: Argic Lithic Cryoborolls, loamy-skeletal, mixed
Position on landscape: North-facing back slopes of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, bluebunch wheatgrass, Idaho fescue

Inclusion 4

Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Hutchley and Terca soils—VIIs, nonirrigated
Range site: Hutchley soil—023XY008NV; Terca soil—023XY039NV; Inclusion 1—023XY007NV; Inclusion 2—023XY016NV; Inclusion 3—023XY017NV; Inclusion 4—none

1310—Hooplite-Singatse association

Map Unit Setting

Position on landscape: Hills

Composition

Major components:
• Hooplite very stony loam, 15 to 50 percent slopes—70 percent
• Singatse very gravelly sandy loam, 15 to 50 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Lithic Xeric Torriorthents very stony loam, 15 to 50 percent slopes—5 percent
• Inclusion 2: Rock outcrop—5 percent
• Inclusion 3: Lithic Torriorthents very gravelly clay, 8 to 30 percent slopes—3 percent
• Inclusion 4: Xeric Torriorthents very gravelly loamy sand, 2 to 8 percent slopes—2 percent

Characteristics of the Hooplite Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Shoulders and back slopes of hills
Parent material: Residuum and colluvium derived from rhyolitic tuff
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,300 feet
Dominant present vegetation: Black sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 20 percent; pebbles, 35 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 8 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 6 to 14 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.7 to 1.2 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Singatse Soil

Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower, south-facing side slopes of hills
Parent material: Residuum and colluvium derived from rhyolitic tuff
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,300 feet
Dominant present vegetation: Shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 1 inch
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 1 to 6 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 6 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 10 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.3 to 0.6 inch
Water-supplying capacity: 3 to 5 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Shoulders and back slopes of hills
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass
Inclusion 2
Position on landscape: Crests and side slopes of hills
Distinctive present vegetation: None
Inclusion 3
Classification: Lithic Torriorthents, clayey, montmorillonitic (calcareous), mesic
Position on landscape: Shoulders and toe slopes of hills
Distinctive present vegetation: Shadscale, desert needlegrass
Inclusion 4
Classification: Xeric Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Channels adjacent to toe slopes of hills
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage

Interpretive Groups

Capability classification: Hooplite and Singatse soils—VIIs, nonirrigated
Range site: Hooplite soil—027XY032NV; Singatse soil—027XY027NV; Inclusion 1—023XY039NV; Inclusion 2—none; Inclusion 3—027XY027NV; Inclusion 4—027XY029NV

1320—Jaybee-Theon-Singatse association

Map Unit Setting

Position on landscape: Hills

Composition

Major components:
• Jaybee very cobbly loam, 4 to 30 percent slopes—50 percent
• Theon very gravelly loam, 4 to 30 percent slopes—25 percent
• Singatse very stony sandy loam, 30 to 50 percent slopes—10 percent
Contrasting inclusions:
• Inclusion 1: Rubble land—4 percent
• Inclusion 2: Xeric Torriorthents very gravelly loam, 30 to 50 percent slopes—4 percent
• Inclusion 3: Bombadil very gravelly loam, 8 to 30 percent slopes—4 percent
• Inclusion 4: Theon very gravelly loam, 15 to 50 percent slopes—3 percent

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: The upper and lower, north-facing side slopes of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,300 to 5,000 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 30 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Theon Soil

Classification: Lithic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: The lower, south-, east-, and west-facing side slopes of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 30 percent
Elevation: 4,300 to 5,000 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 2 inches
Texture: Very gravelly loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 2 to 11 inches
Texture: Very gravelly loam, very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 11 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 8 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 5 to 7 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Singatse Soil

Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower side slopes of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,300 to 5,000 feet
Dominant present vegetation: Shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Stones and boulders, 12 percent; cobbles, 25 percent; pebbles, 40 percent

Depth: 0 to 1 inch
Texture: Very stony sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 1 to 6 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 6 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 10 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.3 to 0.6 inch
Water-supplying capacity: 3 to 5 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Side slopes of hills
Distinctive present vegetation: None
Inclusion 2
Classification: Xeric Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: North-facing back slopes of hills at the higher elevations
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 3
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: North-facing side slopes of hills at the lower elevations
Distinctive present vegetation: Wyoming big sagebrush, bottlebrush squirreltail, Thurber needlegrass
Inclusion 4
Classification: Lithic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: The lower side slopes of hills
Distinctive present vegetation: Shadscale, Bailey greasewood, bottlebrush squirreltail, desert needlegrass

Interpretive Groups

Capability classification: Jaybee, Theon, and Singatse soils—VIIs, irrigated
Range site: Jaybee soil—023XY047NV; Theon soil—027XY013NV; Singatse soil—027XY027NV; Inclusion 1—none; Inclusion 2—023XY047NV; Inclusion 3—023XY006NV; Inclusion 4—027XY019NV

1340—Phing stony sandy loam, 2 to 8 percent slopes

Map Unit Setting

Position on landscape: Summits of fan piedmont remnants

Composition

Major component:
• Phing stony sandy loam, 2 to 8 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Veta very gravelly sandy loam, 2 to 8 percent slopes—7 percent
• Inclusion 2: Verdico very gravelly sandy loam, 4 to 30 percent slopes—3 percent

Characteristics of the Phing Soil

Classification: Xerollic Paleargids, fine, montmorillonitic, mesic
Position on landscape: Summits of fan piedmont remnants
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 4,400 to 5,400 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 10 percent; pebbles, 50 percent

Depth: 0 to 7 inches
Texture: Stony sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 7 to 20 inches
Texture: Clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 20 to 60 inches
Texture: Stratified extremely gravelly sand to gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 3.0 to 4.0 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1

Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Fan aprons and inset fans adjacent to summits of fan piedmont remnants
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Inclusion 2

Classification: Xerollic Paleargids, fine, montmorillonitic, mesic
Position on landscape: Side slopes of fan piedmont remnants
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Interpretive Groups

Capability classification: Phing soil—VIIs, nonirrigated
Range site: Phing soil—023XY047NV; Inclusion 1—023XY038NV; Inclusion 2—023XY047NV

1360—Mastly-Mazuma association

Map Unit Setting

Position on landscape: Stream terraces and lake plain terraces

Composition

Major components:
• Mastly very fine sandy loam, 0 to 2 percent slopes—50 percent
• Mazuma fine sandy loam, 0 to 4 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Zorravista fine sand, 2 to 8 percent slopes—7 percent
• Inclusion 2: Mazuma loamy sand, 0 to 4 percent slopes—6 percent
• Inclusion 3: Xeric Torrifluvents gravelly sandy loam, 0 to 2 percent slopes—2 percent

Characteristics of the Mastly Soil

Classification: Durorthidic Xeric Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Stream terraces
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 6 inches
Texture: Very fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 6 to 60 inches
Texture: Stratified sand to very fine sandy loam
Structure: Platy or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Flooding: Frequency—occasional; duration—very brief; months—December through August
Permeability: Moderately slow
Available water capacity: 7.9 to 9.1 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The slightly higher lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xeric Torripsamments, mixed, mesic
Position on landscape: Dunes superimposed on lake plain terraces
Distinctive present vegetation: Basin big sagebrush, spiny hopsage, Indian ricegrass

Inclusion 2
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Thin sand sheets superimposed on lake plain terraces
Distinctive present vegetation: Black greasewood, Nevada dalea, Indian ricegrass

Inclusion 3

Classification: Xeric Torrifluvents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Stream terraces
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Interpretive Groups

Capability classification: Mastly soil—IIw, irrigated; Mastly soil—VIIw, Mazuma soil—VIIs, nonirrigated
Range site: Mastly soil—024XY006NV; Mazuma soil—024XY003NV; Inclusion 1—023XY011NV; Inclusion 2—027XY012NV; Inclusion 3—024XY006NV

1370—Theon-Jaybee association

Map Unit Setting

Position on landscape: Hills

Composition

Major components:
• Theon very stony loam, 15 to 50 percent slopes—70 percent
• Jaybee very cobbly loam, 30 to 50 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Xerollic Haplargids gravelly sandy loam, 15 to 30 percent slopes—5 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Fireball very cobbly loam, 8 to 30 percent slopes—3 percent
• Inclusion 4: Trocken very gravelly loam, 2 to 15 percent slopes—3 percent

Characteristics of the Theon Soil

Classification: Lithic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-, east-, and west-facing shoulders and back slopes of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Shadscale, Bailey greasewood, bottlebrush squirreltail, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 2 to 11 inches
Texture: Very gravelly loam, very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 11 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 8 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 5 to 7 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Jaybee Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: North-facing side slopes of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 30 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very cobbly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 14 inches
Texture: Gravelly clay
Structure: Prismatic
Consistence: Hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 0.9 to 1.7 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Haplargids, fine-loamy, mixed, mesic
Position on landscape: North-facing toe slopes of hills
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Position on landscape: Crests and side slopes of hills
Distinctive present vegetation: None
Inclusion 3
Classification: Typic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Toe slopes of hills
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 4
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Alluvial fans adjacent to toe slopes of hills
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Theon and Jaybee soils—VIIs, nonirrigated
Range site: Theon soil—027XY019NV; Jaybee soil—023XY047NV; Inclusion 1—023XY047NV; Inclusion 2—none; Inclusion 3—027XY013NV; Inclusion 4—027XY013NV

1372—Theon-Old Camp association

Map Unit Setting

Position on landscape: Hills

Composition

Major components:
• Theon very gravelly loam, 15 to 50 percent slopes—50 percent
• Old Camp very gravelly loam, 15 to 50 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Lithic Torriorthents very gravelly sandy loam, 15 to 50 percent slopes—7 percent
• Inclusion 2: Typic Haplargids very gravelly sandy loam, 4 to 15 percent slopes—4 percent
• Inclusion 3: Xeric Torriorthents very gravelly loamy sand, 0 to 4 percent slopes—3 percent
• Inclusion 4: Rock outcrop—1 percent

Characteristics of the Theon Soil

Classification: Lithic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: South-facing side slopes of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,300 feet
Dominant present vegetation: Shadscale, Bailey greasewood, bottlebrush squirreltail, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 2 inches
Texture: Very gravelly loam

Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 2 to 10 inches
Texture: Very gravelly loam, very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 10 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 8 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 5 to 7 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Old Camp Soil

Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: North-facing side slopes of hills
Parent material: Residuum and colluvium derived from basalt
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,500 feet
Dominant present vegetation: Wyoming big sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 2 inches
Texture: Very gravelly loam

Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 14 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 14 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.0 to 2.0 inches
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.17; T value—1; wind erodibility group—8
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: South-facing side slopes of hills
Distinctive present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass
Inclusion 2
Classification: Typic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Toe slopes of hills
Distinctive present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Classification: Xeric Torriorthents, loamy, skeletal, mixed (calcareous), mesic
Position on landscape: Channels adjacent to toe slopes of hills
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage

Inclusion 4
Position on landscape: Crests and side slopes of hills
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Theon and Old Camp soils—VIIs, nonirrigated
Range site: Theon soil—027XY019NV; Old Camp soil—027XY007NV; Inclusion 1—027XY017NV; Inclusion 2—027XY018NV; Inclusion 3—027XY029NV; Inclusion 4—none

1373—Theon-Trocken-Singatse association

Map Unit Setting

Position on landscape: Hills and lake terraces

Composition

Major components:
• Theon very gravelly loam, 15 to 30 percent slopes—40 percent
• Trocken gravelly sandy loam, 4 to 15 percent slopes—25 percent
• Singatse very gravelly sandy loam, 30 to 50 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Old Camp very gravelly sandy loam, 15 to 50 percent slopes—7 percent
• Inclusion 2: Smaug very fine sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 3: Rock outcrop—3 percent

Characteristics of the Theon Soil

Classification: Lithic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Shoulders of hills
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 15 to 30 percent
Elevation: 4,000 to 4,800 feet
Dominant present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 2 inches
Texture: Very gravelly loam
Structure: Platy
Consistence: Soft, very friable

Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 2 to 11 inches
Texture: Very gravelly loam, very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 11 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 8 to 14 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 5 to 7 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Lake terraces
Parent material: Mixed alluvium
Slope range: 4 to 15 percent
Elevation: 4,000 to 4,400 feet
Dominant present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable

Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 3.0 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Singatse Soil

Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Back slopes of hills
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 4,000 to 4,800 feet
Dominant present vegetation: Shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 1 inch
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 1 to 6 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 6 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 10 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.3 to 0.6 inch
Water-supplying capacity: 3 to 5 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: North-facing side slopes of hills
Distinctive present vegetation: Wyoming big sagebrush, green ephedra, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: The lower lake terraces
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail
Inclusion 3
Position on landscape: Crests and side slopes of hills
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Theon, Trocken, and Singatse soils—VIIs, irrigated
Range site: Theon soil—027XY017NV; Trocken soil—027XY018NV; Singatse soil—027XY027NV; Inclusion 1—026XY022NV; Inclusion 2—024XY004NV; Inclusion 3—none

1392—Ninemile-Newlands association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Ninemile very stony loam, 4 to 15 percent slopes—65 percent
• Newlands stony loam, 4 to 15 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Lithic Argixerolls very stony sandy loam, 4 to 15 percent slopes—9 percent
• Inclusion 2: Lithic Xerollic Haplargids extremely stony clay loam, 2 to 15 percent slopes—3 percent
• Inclusion 3: Rock outcrop—2 percent
• Inclusion 4: Cumulic Cryoborolls loam, 4 to 30 percent slopes—1 percent

Characteristics of the Ninemile Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, frigid
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 4 to 15 percent
Elevation: 6,200 to 7,300 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, bluebunch wheatgrass, Idaho fescue

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 43 degrees F
Frost-free period: About 75 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 20 percent; pebbles, 15 percent

Depth: 0 to 3 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 12 inches
Texture: Clay, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 1.4 to 2.8 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Newlands Soil

Classification: Argic Cryoborolls, fine-loamy, mixed
Position on landscape: Side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 4 to 15 percent
Elevation: 6,200 to 7,300 feet
Dominant present vegetation: Mountain big sagebrush, Idaho fescue, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 14 inches
Average annual air temperature: About 42 degrees F
Frost-free period: About 60 days

Typical Profile

Surface cover: Stones and boulders, 2 percent; cobbles, 5 percent; pebbles, 10 percent

Depth: 0 to 8 inches
Texture: Stony loam
Structure: Granular
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 45 inches
Texture: Clay loam, gravelly clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 45 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 6.4 to 9.6 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—2; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, clayey, montmorillonitic, frigid
Position on landscape: Summits and shoulders of plateaus
Distinctive present vegetation: Mountain big sagebrush, antelope bitterbrush, bluebunch wheatgrass
Inclusion 2
Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, frigid
Position on landscape: Summits and shoulders of plateaus
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 3
Position on landscape: Rims of plateaus
Distinctive present vegetation: None
Inclusion 4
Classification: Cumulic Cryoborolls, loamy-skeletal, mixed
Position on landscape: North- and east-facing toe slopes of plateaus below areas of rimrock
Distinctive present vegetation: Quaking aspen, snowberry, mountain brome

Interpretive Groups

Capability classification: Ninemile and Newlands soils—VIIs, nonirrigated
Range site: Ninemile soil—023XY017NV; Newlands soil—023XY007NV; Inclusion 1—023XY015NV; Inclusion 2—023XY008NV; Inclusion 3—none; Inclusion 4—023XY028NV

1401—Dedmount-Umberland association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Dedmount silt loam, 0 to 2 percent slopes—50 percent
• Umberland silty clay loam, 0 to 2 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Aquic Haploxerolls loam, 0 to 2 percent slopes—6 percent
• Inclusion 2: Veta gravelly fine sandy loam, 2 to 8 percent slopes—4 percent
• Inclusion 3: Umberland loam, 0 to 2 percent slopes—3 percent
• Inclusion 4: Swingler loam, 0 to 2 percent slopes—2 percent

Characteristics of the Dedmount Soil

Classification: Aquic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Mixed alluvium and lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 2 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 2 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Massive or angular blocky
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: 2 to 8 mmhos per cm
Sodicity: SAR 25 to 50

Soil and Water Features

Depth to a seasonal high water table: 48 to 72 inches
Frequency of flooding: Rare

Permeability: Slow
Available water capacity: 10.0 to 12.0 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Characteristics of the Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Inland saltgrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 5 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 5 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Seasonal high water table: 12 inches above to 30 inches below the surface
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Contrasting Inclusions

Inclusion 1
Classification: Aquic Haploxerolls, fine, montmorillonitic, mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Sedges, rush
Inclusion 2
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Alluvial fans adjacent to lake plain terraces
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 3
Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: Dissected lake plain terraces
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye
Inclusion 4
Classification: Typic Torriorthents, fine-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush

Interpretive Groups

Capability classification: Dedmount soil—VIIs, nonirrigated; Umberland soil—VIIw, nonirrigated
Range site: Dedmount soil—024XY006NV; Umberland soil—026XY002NV; Inclusion 1—none; Inclusion 2—023XY038NV; Inclusion 3—023XY005NV; Inclusion 4—024XY003NV

1410—Juva loam

Map Unit Setting

Position on landscape: Alluvial fans

Composition

Major component:
• Juva loam, 0 to 2 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Typic Torrifluvents sandy loam, 0 to 2 percent slopes—8 percent
• Inclusion 2: Slaw silt loam, 0 to 2 percent slopes—5 percent
• Inclusion 3: Typic Torrifluvents gravelly loamy sand, 0 to 2 percent slopes—2 percent

Characteristics of the Juva Soil

Classification: Typic Torrifluvents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Alluvial fans
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 4,000 to 4,200 feet
Dominant present vegetation: Alfalfa

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Loam
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 65 inches
Texture: Stratified sand to silt loam
Structure: Single grained or massive
Consistence: Slightly hard, friable
Reaction: Moderately alkaline or strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR 13 to 30

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Flooding: Frequency—occasional; duration—very brief; months—June through September
Permeability: Moderately rapid
Available water capacity: 4.7 to 6.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torrifluvents, sandy-skeletal, mixed, mesic
Position on landscape: Alluvial fans
Distinctive present vegetation: Alfalfa

Inclusion 2
Classification: Typic Torrifluvents, fine-silty, mixed (calcareous), mesic
Position on landscape: Alluvial flats
Distinctive present vegetation: Alfalfa

Inclusion 3
Classification: Typic Torrifluvents, sandy-skeletal, mixed, mesic
Position on landscape: Stream terrace remnants adjacent to alluvial fans
Distinctive present vegetation: Alfalfa

Interpretive Groups

Capability classification: Juva soil—IIw, irrigated; VIIw, nonirrigated
Range site: Juva soil—none; Inclusion 1—none; Inclusion 2—none; Inclusion 3—none

1420—Perwaso complex

Map Unit Setting

Position on landscape: Alluvial flats

Composition

Major components:
• Perwaso silt loam, 0 to 2 percent slopes, occasionally flooded—50 percent
• Perwaso silt loam, 0 to 2 percent slopes, rarely flooded—35 percent
Contrasting inclusions:
• Inclusion 1: Juva loam, 0 to 2 percent slopes—6 percent
• Inclusion 2: Slaw silty clay loam, 0 to 2 percent slopes—6 percent
• Inclusion 3: Perwaso gravelly loam, 0 to 2 percent slopes—3 percent

Characteristics of the Occasionally Flooded Perwaso Soil

Classification: Typic Torrifluvents, fine-loamy over sandy or sandy-skeletal, mixed (calcareous), mesic
Position on landscape: The slightly lower alluvial flats
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 3,980 to 4,440 feet
Dominant present vegetation: Torrey quailbush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 3 inches

Texture: Silt loam
Structure: Platy
Consistence: Hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 30 to 50

Depth: 3 to 36 inches
Texture: Stratified silt loam to sandy clay loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 30

Depth: 36 to 60 inches
Texture: Gravelly loamy coarse sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 30 to 50

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Flooding: Frequency—occasional; duration—very brief or brief; months—December through May
Permeability: Moderate
Available water capacity: 6.8 to 8.0 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Characteristics of the Rarely Flooded Perwaso Soil

Classification: Typic Torrifluvents, fine-loamy over sandy or sandy-skeletal, mixed (calcareous), mesic
Position on landscape: The slightly higher alluvial flats
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 3,980 to 4,440 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 3 inches
Texture: Silt loam
Structure: Platy
Consistence: Hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 30 to 50

Depth: 3 to 36 inches
Texture: Stratified silt loam to sandy clay loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 30

Depth: 36 to 60 inches
Texture: Gravelly loamy coarse sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 30 to 50

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 6.8 to 8.0 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torrifluvents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Fan skirts adjacent to alluvial flats
Distinctive present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Typic Torrifluvents, fine-silty, mixed (calcareous), mesic
Position on landscape: The lower alluvial flats
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye

Inclusion 3

Classification: Typic Torrifluvents, fine-loamy over sandy or sandy-skeletal, mixed (calcareous), mesic
Position on landscape: Channels cut into alluvial flats
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye

Interpretive Groups

Capability classification: The occasionally flooded Perwaso soil—VIIw, nonirrigated; the rarely flooded Perwaso soil—VIIs, nonirrigated
Range site: The occasionally flooded Perwaso soil—024XY015NV; the rarely flooded Perwaso soil—027XY025NV; Inclusion 1—027XY018NV; Inclusion 2—024XY015NV; Inclusion 3—024XY015NV

1430—Slaw complex

Map Unit Setting

Position on landscape: Alluvial flats

Composition

Major components:
• Slaw silt loam, 0 to 2 percent slopes, rarely flooded—55 percent
• Slaw silt loam, 0 to 2 percent slopes, occasionally flooded—35 percent
Contrasting inclusions:
• Inclusion 1: Juva loam, 0 to 2 percent slopes—5 percent
• Inclusion 2: Typic Torrifluvents silt loam, 0 to 2 percent slopes—5 percent

Characteristics of the Rarely Flooded Slaw Soil

Classification: Typic Torrifluvents, fine-silty, mixed (calcareous), mesic
Position on landscape: The higher alluvial flats
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 4,000 to 4,100 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Silt loam
Structure: Platy
Consistence: Very hard, friable
Reaction: Very strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 10 to 60 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, firm
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Slow
Available water capacity: 9.9 to 12.0 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Occasionally Flooded Slaw Soil

Classification: Typic Torrifluvents, fine-silty, mixed (calcareous), mesic
Position on landscape: The lower alluvial flats
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 4,000 to 4,100 feet
Dominant present vegetation: Torrey quailbush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 9 inches
Texture: Silt loam
Structure: Platy
Consistence: Very hard, friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR 23 to 68

Depth: 9 to 60 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, firm

Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Flooding: Frequency—occasional; duration—very brief or brief; months—December through June
Permeability: Slow
Available water capacity: 9.9 to 12.0 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.55; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—high
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Typic Torrifluvents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Fan skirts adjacent to alluvial flats
Distinctive present vegetation: Bailey greasewood, shadscale, bud sagebrush, bottlebrush squirreltail
Inclusion 2
Classification: Typic Torrifluvents, fine-silty, mixed (calcareous), mesic
Position on landscape: Channels cut into alluvial flats
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye

Interpretive Groups

Capability classification: The rarely flooded Slaw soil—VIIs, nonirrigated; the occasionally flooded Slaw soil—VIIw, nonirrigated
Range site: The rarely flooded Slaw soil—027XY025NV; the occasionally flooded Slaw soil—024XY015NV; Inclusion 1—027XY018NV; Inclusion 2—024XY015NV

1440—Umberland silty clay loam

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major component:
• Umberland silty clay loam, 0 to 2 percent slopes—85 percent

Contrasting inclusions:
• Inclusion 1: Typic Halaquepts silt loam, 0 to 2 percent slopes—7 percent
• Inclusion 2: Umberland silty clay loam, 0 to 2 percent slopes, ponded—5 percent
• Inclusion 3: Umberland silty clay loam, 0 to 2 percent slopes—3 percent

Characteristics of the Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Rubber rabbitbrush, black greasewood, inland saltgrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 15 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 15 to 60 inches
Texture: Silty clay
Structure: Subangular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 23

Soil and Water Features

Depth to a seasonal high water table: 30 to 60 inches
Flooding: Frequency—occasional; duration—long; months—December through June
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Contrasting Inclusions

Inclusion 1

Classification: Typic Halaquepts, coarse-silty, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces adjacent to hot springs
Distinctive present vegetation: Black greasewood, inland saltgrass, Baltic rush

Inclusion 2

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Inland saltgrass

Inclusion 3

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The higher lake plain terraces
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye

Interpretive Groups

Capability classification: Umberland soil—VIIw, nonirrigated
Range site: Umberland soil—024XY007NV; Inclusion 1—027XY005NV; Inclusion 2—026XY002NV; Inclusion 3—024XY015NV

1442—Umberland-Benin association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Umberland silt loam, 0 to 2 percent slopes—55 percent
• Benin silt loam, 0 to 2 percent slopes—35 percent
Contrasting inclusions:
• Inclusion 1: Cumulic Haploxerolls silt loam, 0 to 4 percent slopes—6 percent
• Inclusion 2: Fluvaquents loam, 0 to 4 percent slopes—2 percent
• Inclusion 3: Mazuma fine sandy loam, 0 to 2 percent slopes—2 percent

Characteristics of the Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Rubber rabbitbrush, black greasewood, inland saltgrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 15 inches
Texture: Silt loam
Structure: Massive
Consistence: Hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 15 to 60 inches
Texture: Silty clay
Structure: Subangular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 23

Soil and Water Features

Depth to a seasonal high water table: 30 to 60 inches
Flooding: Frequency—occasional; duration—long; months—December through June
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Characteristics of the Benin Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The upper lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Black greasewood, inland saltgrass, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches

Texture: Silt loam
Structure: Massive
Consistence: Hard, very friable
Reaction: Very strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 8 to 70 inches
Texture: Silty clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, very firm
Reaction: Moderately alkaline or strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR more than 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Very slow
Available water capacity: 9.0 to 9.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.49; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Cumulic Haploxerolls
Position on landscape: Stream terraces cut into lake plain terraces
Distinctive present vegetation: Black greasewood, shadscale, inland saltgrass, basin wildrye
Inclusion 2
Classification: Fluvaquents
Position on landscape: Stream channels cut into lake plain terraces
Distinctive present vegetation: Willow, cottonwood, basin big sagebrush
Inclusion 3
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Alluvial flats adjacent to lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Benin soil—IVs, irrigated; Umberland soil—VIIw, Benin soil—VIIs, nonirrigated
Range site: Umberland soil—024XY007NV; Benin soil—024XY011NV; Inclusion 1—027XY006NV; Inclusion 2—023XY034NV; Inclusion 3—024XY002NV

1443—Umberland-Ragtown association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Umberland silt loam, 0 to 2 percent slopes—45 percent
• Ragtown silt loam, 0 to 2 percent slopes—30 percent
• Umberland silty clay loam, ponded, 0 to 2 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Playas—8 percent
• Inclusion 2: Typic Haplaquolls loam, 0 to 2 percent slopes—2 percent

Characteristics of Umberland Silt Loam

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The higher lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Torrey quailbush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 15 inches
Texture: Silt loam
Structure: Massive
Consistence: Hard, friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 15 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 23

Soil and Water Features

Depth to a seasonal high water table: 30 to 60 inches

Frequency of flooding: Rare
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The middle lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Silt loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 8 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 16 inches
Texture: Clay loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 16 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Ponded Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Inland saltgrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 5 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 5 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Seasonal high water table: 12 inches above to 30 inches below the surface
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L

Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Contrasting Inclusions

Inclusion 1
Position on landscape: Concave area on lake plain terraces
Distinctive present vegetation: None
Inclusion 2
Classification: Typic Haplaquolls, fine-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces adjacent to seeps
Distinctive present vegetation: Sedge, rush

Interpretive Groups

Capability classification: Umberland soils—VIIw, nonirrigated; Ragtown soil—VIIs, nonirrigated
Range site: Umberland silt loam—024XY015NV; Ragtown soil—027XY025NV; the ponded Umberland soil—026XY002NV; Inclusion 1—none; Inclusion 2—027XY004NV

1444—Umberland silty clay loam, ponded

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major component:
• Umberland silty clay loam, 0 to 2 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Ragtown silty clay loam, 0 to 2 percent slopes—6 percent
• Inclusion 2: Aquic Torriorthents silty clay loam, 0 to 2 percent slopes—4 percent

Characteristics of the Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Iodinebush, inland saltgrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 5 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 5 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Seasonal high water table: 12 inches above to 30 inches below the surface
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The slightly higher lake plain terraces
Distinctive present vegetation: Black greasewood, seepweed, shadscale
Inclusion 2
Classification: Aquic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The higher lake plain terraces
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye

Interpretive Groups

Capability classification: Umberland soil—VIIw, nonirrigated
Range site: Umberland soil—027XY077NV; Inclusion 1—027XY025NV; Inclusion 2—024XY015NV

1445—Umberland-Playas-Ragtown association

Map Unit Setting

Position on landscape: Lake plain terraces and basin floors

Composition

Major components:
- Umberland silty clay loam, 0 to 2 percent slopes—50 percent
- Playas—25 percent
- Ragtown silty clay loam, 2 to 4 percent slopes—15 percent

Contrasting inclusions:
- Inclusion 1: Typic Torriorthents clay, 4 to 15 percent slopes—5 percent
- Inclusion 2: Badland—5 percent

Characteristics of the Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: Undulating lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Inland saltgrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 5 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, very friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 5 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Seasonal high water table: 12 inches above to 30 inches below the surface
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Characteristics of the Playas

Position on landscape: Undrained intermountain basins

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Summits and the upper side slopes of isolated, eroded lake plain terrace remnants
Parent material: Lacustrine sediments
Slope range: 2 to 4 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Concave side slopes of isolated, eroded lake plain terrace remnants
Distinctive present vegetation: Inland saltgrass
Inclusion 2
Position on landscape: Eroded lake plain terrace remnants
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Umberland soil—VIIw, nonirrigated; Ragtown soil—VIIs, nonirrigated; Playas—VIIIw, nonirrigated
Range site: Umberland soil—026XY002NV; Playas—none; Ragtown soil—027XY025NV; Inclusion 1—026XY002NV; Inclusion 2—none

1446—Umberland association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Umberland silty clay loam, 0 to 2 percent slopes, ponded—55 percent
• Umberland silty clay loam, 0 to 2 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Aeric Halaquepts silt loam, 0 to 2 percent slopes—9 percent
• Inclusion 2: Umberland silty clay loam, 0 to 2 percent slopes—3 percent
• Inclusion 3: Cumulic Haplaquolls silt loam, 0 to 2 percent slopes—2 percent
• Inclusion 4: Umberland silty clay loam, 0 to 2 percent slopes—1 percent

Characteristics of the Ponded Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Iodinebush, inland saltgrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 5 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 5 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Seasonal high water table: 12 inches above to 30 inches below the surface
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Characteristics of the Unponded Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The slightly higher lake plain terraces

Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Black greasewood, inland saltgrass, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 15 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 15 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 23

Soil and Water Features

Depth to a seasonal high water table: 30 to 60 inches
Frequency of flooding: Rare
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Contrasting Inclusions

Inclusion 1
Classification: Aeric Halaquepts, fine-silty, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Iodinebush, inland saltgrass

Inclusion 2
Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The higher lake plain terraces
Distinctive present vegetation: Torrey quailbush, black greasewood, basin wildrye

Inclusion 3
Classification: Cumulic Haplaquolls, fine-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces adjacent to seeps
Distinctive present vegetation: Baltic rush, inland saltgrass

Inclusion 4
Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Inland saltgrass

Interpretive Groups

Capability classification: Umberland soils—VIIw, nonirrigated
Range site: The ponded Umberland soil—027XY077NV; the unponded Umberland soil—024XY011NV; Inclusion 1—027XY077NV; Inclusion 2—024XY015NV; Inclusion 3—024XY043NV; Inclusion 4—026XY002NV

1447—Umberland-Dedmount association

Map Unit Setting

Position on landscape: Lake plain terraces and flood plains

Composition

Major components:
• Dedmount loam, 0 to 2 percent slopes—40 percent
• Umberland silty clay loam, 0 to 2 percent slopes—30 percent
• Umberland silty clay loam, 0 to 2 percent slopes, ponded—15 percent
Contrasting inclusions:
• Inclusion 1: Dedmount loamy sand, 0 to 4 percent slopes—7 percent
• Inclusion 2: Typic Torriorthents silt loam, 0 to 4 percent slopes—3 percent
• Inclusion 3: Umberland silty clay loam, 0 to 2 percent slopes—3 percent
• Inclusion 4: Playas—2 percent

Characteristics of the Dedmount Soil

Classification: Aquic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The higher lake plain terraces
Parent material: Mixed alluvium and lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet

Dominant present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 2 inches
Texture: Loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 2 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Massive or angular blocky
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: 2 to 8 mmhos per cm
Sodicity: SAR 25 to 50

Soil and Water Features

Depth to a seasonal high water table: 48 to 72 inches
Frequency of flooding: Rare
Permeability: Slow
Available water capacity: 10.0 to 12.0 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.49; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Characteristics of the Unponded Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The middle lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Torrey quailbush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 15 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 15 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 23

Soil and Water Features

Depth to a seasonal high water table: 30 to 60 inches
Frequency of flooding: Rare
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Characteristics of the Ponded Umberland Soil

Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces and flood plains
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Inland saltgrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 6 inches
Texture: Silty clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Very strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 6 to 60 inches
Texture: Silty clay loam, silty clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Strongly alkaline
Salinity: More than 4 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Seasonal high water table: 12 inches above to 30 inches below the surface
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 9.2 to 12.5 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Very slow
Hydrologic group: D
Erosion factors (surface layer): K value—.37; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: High

Contrasting Inclusions

Inclusion 1
Classification: Aquic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Thin sand sheets superimposed on lake plain terraces
Distinctive present vegetation: Basin big sagebrush, black greasewood, basin wildrye
Inclusion 2
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The highest lake plain terraces
Distinctive present vegetation: Black greasewood, sagebrush, basin wildrye
Inclusion 3
Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: Flood plains and lake plain terraces adjacent to seeps
Distinctive present vegetation: Rubber rabbitbrush, black greasewood, inland saltgrass
Inclusion 4
Position on landscape: The lowest part of lake plain terraces
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Dedmount soil—VIIs, nonirrigated; Umberland soils—VIIw, nonirrigated
Range site: Dedmount soil—024XY006NV; the unponded Umberland soil—024XY015NV; the ponded Umberland soil—026XY002NV; Inclusion 1—024XY006NV; Inclusion 2—024XY022NV; Inclusion 3—024XY007NV; Inclusion 4—none

1460—Chalco association

Map Unit Setting

Position on landscape: Rock pediment remnants

Composition

Major components:
• Chalco very gravelly loam, 4 to 30 percent slopes—60 percent
• Chalco very gravelly loam, dry, 8 to 30 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Chalco very stony loam, 30 to 50 percent slopes—7 percent
• Inclusion 2: Pickup cobbly loam, 30 to 50 percent slopes—2 percent
• Inclusion 3: Rock outcrop—1 percent

Characteristics of the Chalco Soil

Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Summits and north-facing side slopes of rock pediment remnants
Parent material: Residuum and colluvium derived from tuff
Slope range: 4 to 30 percent
Elevation: 4,400 to 5,600 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 3 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 15 inches
Texture: Clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Neutral

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 to 30 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 1.3 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Dry Chalco Soil

Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: South-facing side slopes of rock pediment remnants
Parent material: Residuum and colluvium derived from tuff
Slope range: 8 to 30 percent
Elevation: 4,400 to 5,600 feet
Dominant present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 3 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 15 inches
Texture: Clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 to 30 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 1.3 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Back slopes of rock pediment remnants
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Thurber needlegrass
Inclusion 2
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: Concave, north-facing back slopes of rock pediment remnants
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot
Inclusion 3
Position on landscape: Rock pediment remnants
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Chalco soils—VIIs, nonirrigated
Range site: Chalco soil—026XY025NV; the dry Chalco soil—023XY030NV; Inclusion 1—026XY025NV; Inclusion 2—023XY037NV; Inclusion 3—none

1461—Chalco-Pickup association

Map Unit Setting

Position on landscape: Rock pediment remnants

Composition

Major components:
• Chalco very gravelly clay loam, 30 to 50 percent slopes—35 percent
• Chalco very gravelly loam, 15 to 50 percent slopes—30 percent
• Pickup very stony loam, 30 to 50 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Devada stony loam, 8 to 30 percent slopes—5 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Softscrabble very stony loam, 15 to 50 percent slopes—4 percent
• Inclusion 4: Fluvaquents very gravelly sandy loam, 4 to 15 percent slopes—2 percent

Characteristics of Chalco Very Gravelly Clay Loam

Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: South-facing back slopes of rock pediment remnants
Parent material: Residuum and colluvium derived from tuff
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,800 feet
Dominant present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 3 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 15 inches
Texture: Clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 to 30 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 1.3 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of Chalco Very Gravelly Loam

Classification: Xerollic Haplargids, clayey, montmorillonitic, mesic, shallow
Position on landscape: Convex, north-facing side slopes of rock pediment remnants
Parent material: Residuum and colluvium derived from tuff
Slope range: 15 to 50 percent
Elevation: 4,400 to 5,800 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 3 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 3 to 15 inches
Texture: Clay
Structure: Angular blocky
Consistence: Very hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 to 30 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 1.3 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Pickup Soil

Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: Concave, north-facing side slopes of rock pediment remnants
Parent material: Residuum and colluvium derived from basalt
Slope range: 30 to 50 percent
Elevation: 4,400 to 5,800 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 34 inches
Texture: Very gravelly clay
Structure: Prismatic parting to subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 34 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.2 to 4.4 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—7
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Crests and shoulders of the higher hill remnants
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 2
Position on landscape: Rock pediment remnants
Distinctive present vegetation: None
Inclusion 3
Classification: Pachic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Concave back slopes of rock pediment remnants at the higher elevations
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye
Inclusion 4
Classification: Fluvaquents
Position on landscape: Stream channels cut into rock pediment remnants
Distinctive present vegetation: Willow, cottonwood, basin big sagebrush

Interpretive Groups

Capability classification: Chalco and Pickup soils—VIIs, nonirrigated
Range site: Chalco very gravelly clay loam—023XY030NV; Chalco very gravelly loam—026XY025NV; Pickup soil—023XY037NV; Inclusion 1—023XY031NV; Inclusion 2—none; Inclusion 3—023XY041NV; Inclusion 4—023XY034NV

1470—Squawval-Hutchley-Tosp association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
- Squawval loam, 8 to 30 percent slopes—45 percent
- Hutchley very gravelly loam, 4 to 30 percent slopes—30 percent
- Tosp loam, 8 to 30 percent slopes—10 percent

Contrasting inclusions:
- Inclusion 1: Squawval loam, 30 to 50 percent slopes—5 percent
- Inclusion 2: Pachic Cryoborolls loam, 8 to 30 percent slopes—5 percent
- Inclusion 3: Cumulic Cryoborolls loam, 0 to 8 percent slopes—3 percent
- Inclusion 4: Rock outcrop—2 percent

Characteristics of the Squawval Soil

Classification: Argic Pachic Cryoborolls, fine-loamy, mixed
Position on landscape: Slightly concave crests and side slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 8 to 30 percent
Elevation: 6,400 to 8,000 feet
Dominant present vegetation: Mountain big sagebrush, snowberry, mountain brome

Climatic Data

Average annual precipitation: About 16 inches
Average annual air temperature: About 42 degrees F
Frost-free period: About 50 days

Typical Profile

Depth: 0 to 5 inches
Texture: Loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 35 inches
Texture: Loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 35 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 3.1 to 6.2 inches
Water-supplying capacity: 14 to 18 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—5
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Hutchley Soil

Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Convex crests and shoulders of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 4 to 30 percent
Elevation: 6,400 to 8,000 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 16 inches
Average annual air temperature: About 42 degrees F
Frost-free period: About 65 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 6 inches
Texture: Very gravelly loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 15 inches
Texture: Very gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 10 to 20 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 0.6 to 1.0 inch
Water-supplying capacity: 8 to 10 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Tosp Soil

Classification: Pachic Cryoborolls, coarse-loamy, mixed
Position on landscape: Concave side slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 8 to 30 percent
Elevation: 6,400 to 8,000 feet
Dominant present vegetation: Quaking aspen, snowberry, mountain brome

Climatic Data

Average annual precipitation: About 16 inches
Average annual air temperature: About 42 degrees F
Frost-free period: About 50 days

Typical Profile

Depth: 0 to 19 inches
Texture: Loam
Structure: Granular
Consistence: Slightly hard, very friable
Reaction: Medium acid
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 19 to 33 inches
Texture: Sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Slightly acid
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 33 to 60 inches
Texture: Very gravelly coarse sandy loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Slightly acid
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 60 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 5.2 to 7.8 inches
Water-supplying capacity: 18 to 20 inches
Runoff: Rapid
Hydrologic group: B
Erosion factors (surface layer): K value—.24; T value—3; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—moderate
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Argic Pachic Cryoborolls, fine-loamy, mixed
Position on landscape: Side slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, snowberry, mountain brome

Inclusion 2
Classification: Pachic Cryoborolls, loamy-skeletal, mixed
Position on landscape: Concave back slopes of mountains
Distinctive present vegetation: Quaking aspen, common snowberry, mountain brome

Inclusion 3
Classification: Cumulic Cryaquolls
Position on landscape: Stream terraces and seeps adjacent to toe slopes of mountains
Distinctive present vegetation: Rubber rabbitbrush, rush, sedge

Inclusion 4
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Squawval and Tosp soils—VIe; Hutchley soil—VIIs, nonirrigated
Range site: Squawval soil—023XY019NV; Hutchley soil—023XY008NV; Tosp soil—023XY028NV; Inclusion 1—023XY019NV; Inclusion 2—023XY027NV; Inclusion 3—023XY025NV; Inclusion 4—none

1480—Eaglerock-Wagore association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Eaglerock very stony sandy loam, 30 to 50 percent slopes—55 percent
• Wagore stony loam, 30 to 50 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Rock outcrop—5 percent
• Inclusion 2: Lithic Argixerolls stony loam, 4 to 30 percent slopes—4 percent
• Inclusion 3: Eaglerock extremely bouldery sandy loam, 8 to 30 percent slopes—4 percent
• Inclusion 4: Cumulic Cryoborolls loam, 4 to 30 percent slopes—2 percent

Characteristics of the Eaglerock Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: South-facing back slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 30 to 50 percent
Elevation: 4,800 to 7,800 feet
Dominant present vegetation: Bluebunch wheatgrass, mountain big sagebrush

Climatic Data

Average annual precipitation: About 13 inches
Average annual air temperature: About 45 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 25 percent

Depth: 0 to 10 inches
Texture: Very stony sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 36 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 36 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 1.7 to 3.4 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.10; T value—2; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Wagore Soil

Classification: Pachic Haploxerolls, coarse-loamy, mixed, frigid
Position on landscape: North-facing back slopes of mountains
Parent material: Colluvium derived from granite and eolian material
Slope range: 30 to 50 percent
Elevation: 4,800 to 7,800 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 13 inches
Average annual air temperature: About 43 degrees F
Frost-free period: About 60 days

Typical Profile

Surface cover: Stones and boulders, 3 percent; cobbles, 5 percent; pebbles, 10 percent

Depth: 0 to 12 inches
Texture: Stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 60 inches
Texture: Gravelly coarse sandy loam
Structure: Massive
Consistence: Slightly hard, friable

Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 60 to 80 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 5.4 to 6.6 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very rapid
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—6
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None
Inclusion 2
Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Crests and shoulders of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass
Inclusion 3
Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: South-facing back slopes of mountains, adjacent to rock outcrop
Distinctive present vegetation: Bluebunch wheatgrass, mountain big sagebrush
Inclusion 4
Classification: Cumulic Cryoborolls, loamy-skeletal, mixed
Position on landscape: Stream terraces and seeps
Distinctive present vegetation: Quaking aspen, snowberry, mountain brome

Interpretive Groups

Capability classification: Eaglerock and Wagore soils—VIIs, nonirrigated
Range site: Eaglerock soil—023XY016NV; Wagore soil—023XY041NV; Inclusion 1—none; Inclusion 2—023XY031NV; Inclusion 3—023XY016NV; Inclusion 4—023XY028NV

1490—Berit-Deanran-Rock outcrop association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Berit extremely bouldery sandy loam, 50 to 75 percent slopes—45 percent
• Deanran extremely bouldery sandy loam, 50 to 75 percent slopes—30 percent
• Rock outcrop—10 percent
Contrasting inclusions:
• Inclusion 1: Xeric Torriorthents stony sandy loam, 50 to 75 percent slopes—6 percent
• Inclusion 2: Torriorthentic Haploxerolls very stony sandy loam, 50 to 75 percent slopes—4 percent
• Inclusion 3: Lithic Argixerolls extremely stony clay, 4 to 30 percent slopes—3 percent
• Inclusion 4: Noslo very stony coarse sandy loam, 50 to 75 percent slopes—2 percent

Characteristics of the Berit Soil

Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic, shallow
Position on landscape: South- and west-facing back slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 50 to 75 percent
Elevation: 4,800 to 7,200 feet
Dominant present vegetation: Utah juniper, purple sage, mountain big sagebrush

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 20 percent; cobbles, 10 percent; pebbles, 25 percent

Depth: 0 to 4 inches
Texture: Extremely bouldery sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 11 inches
Texture: Very gravelly sandy clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable

Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 11 to 21 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 14 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.3 to 0.9 inch
Water-supplying capacity: 10 to 12 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Deanran Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid, shallow
Position on landscape: North- and east-facing back slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 50 to 75 percent
Elevation: 5,400 to 8,000 feet
Dominant present vegetation: Utah juniper, purple sage, mountain big sagebrush

Climatic Data

Average annual precipitation: About 12 inches
Average annual air temperature: About 43 degrees F
Frost-free period: About 70 days

Typical Profile

Surface cover: Stones and boulders, 20 percent; cobbles, 5 percent; pebbles, 15 percent

Depth: 0 to 4 inches
Texture: Extremely bouldery sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 8 inches
Texture: Very gravelly sandy clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 21 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 7 to 14 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.5 to 1.0 inch
Water-supplying capacity: 10 to 12 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—6
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Back slopes of mountains
Kind of rock: Granite

Contrasting Inclusions

Inclusion 1
Classification: Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic, shallow
Position on landscape: Steep, south-facing back slopes of mountains
Distinctive present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Inclusion 2
Classification: Torriorthentic Haploxerolls, loamy-skeletal, mixed, frigid, shallow
Position on landscape: North-facing back slopes of mountains
Distinctive present vegetation: Utah juniper, purple sage, mountain big sagebrush

Inclusion 3
Classification: Lithic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Crests and shoulders of mountains at the higher elevations
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Utah juniper

Inclusion 4
Classification: Aridic Argixerolls, fine-loamy, mixed, mesic

Position on landscape: Shoulders and back slopes of mountains at the lower elevations
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Interpretive Groups

Capability classification: Berit and Deanran soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Berit soil—023XY036NV; Deanran soil—023XY036NV; Rock outcrop—none; Inclusion 1—023XY030NV; Inclusion 2—023XY036NV; Inclusion 3—023XY035NV; Inclusion 4—023XY039NV

1491—Berit-Noslo-Rock outcrop association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Berit extremely bouldery sandy loam, 50 to 75 percent slopes—50 percent
• Noslo extremely bouldery sandy loam, 30 to 50 percent slopes—30 percent
• Rock outcrop—10 percent
Contrasting inclusions:
• Inclusion 1: Aridic Argixerolls very stony loam, 4 to 30 percent slopes—6 percent
• Inclusion 2: Slocave bouldery coarse sandy loam, 30 to 75 percent slopes—2 percent
• Inclusion 3: Greenbrae stony sandy loam, 4 to 15 percent slopes—2 percent

Characteristics of the Berit Soil

Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic, shallow
Position on landscape: South-, east-, and west-facing back slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 50 to 75 percent
Elevation: 4,800 to 6,300 feet
Dominant present vegetation: Utah juniper, purple sage, mountain big sagebrush

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 20 percent; cobbles, 10 percent; pebbles, 25 percent

Depth: 0 to 4 inches
Texture: Extremely bouldery sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 11 inches
Texture: Very gravelly sandy clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 11 to 21 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 14 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.3 to 0.9 inch
Water-supplying capacity: 10 to 12 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Noslo Soil

Classification: Aridic Argixerolls, fine-loamy, mixed, mesic
Position on landscape: North-facing back slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 30 to 50 percent
Elevation: 4,800 to 6,300 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 35 percent; cobbles, 5 percent; pebbles, 10 percent

Depth: 0 to 13 inches
Texture: Extremely bouldery sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 13 to 30 inches
Texture: Sandy clay loam
Structure: Subangular blocky
Consistence: Hard, firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 30 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 2.0 to 4.0 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Back slopes of mountains
Kind of rock: Granite

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, loamy, mixed, mesic, shallow
Position on landscape: Crests and shoulders of mountains
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Inclusion 2
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic, shallow
Position on landscape: The lower, south-facing back slopes of mountains
Distinctive present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Inclusion 3
Classification: Xerollic Haplargids, fine-loamy, mixed, mesic
Position on landscape: Alluvial fans adjacent to toe slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Interpretive Groups

Capability classification: Berit and Noslo soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Berit soil—023XY036NV; Noslo soil—023XY039NV; Rock outcrop—none; Inclusion 1—023XY037NV; Inclusion 2—027XY017NV; Inclusion 3—023XY020NV

1500—Hastee-Granipeak-Rock outcrop association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Hastee extremely bouldery coarse sandy loam, 50 to 75 percent slopes—45 percent
• Granipeak extremely bouldery coarse sandy loam, 30 to 50 percent slopes—30 percent
• Rock outcrop—10 percent
Contrasting inclusions:
• Inclusion 1: Hutchley very bouldery coarse sandy loam, 4 to 30 percent slopes—7 percent
• Inclusion 2: Argic Pachic Cryoborolls very bouldery sandy loam, 15 to 50 percent slopes—5 percent
• Inclusion 3: Cumulic Cryoborolls loam, 0 to 8 percent slopes—2 percent
• Inclusion 4: Cumulic Cryoborolls loam, 4 to 30 percent slopes—1 percent

Characteristics of the Hastee Soil

Classification: Pachic Cryoborolls, sandy, mixed
Position on landscape: Slightly concave back slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 50 to 75 percent
Elevation: 7,000 to 9,000 feet
Dominant present vegetation: Mountain big sagebrush, snowberry, mountain brome

Climatic Data

Average annual precipitation: About 17 inches
Average annual air temperature: About 40 degrees F
Frost-free period: About 60 days

Typical Profile

Surface cover: Stones and boulders, 35 percent; pebbles, 5 percent

Depth: 0 to 17 inches
Texture: Extremely bouldery coarse sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Slightly acid
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 17 to 45 inches
Texture: Very stony loamy coarse sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Slightly acid or neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 45 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Rapid
Available water capacity: 4.3 to 6.4 inches
Water-supplying capacity: 16 to 18 inches
Runoff: Very rapid
Hydrologic group: B
Erosion factors (surface layer): K value—.05; T value—3; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Granipeak Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: South-facing, slightly concave or smooth back slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 30 to 50 percent
Elevation: 7,000 to 9,000 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye

Climatic Data

Average annual precipitation: About 17 inches
Average annual air temperature: About 40 degrees F
Frost-free period: About 60 days

Typical Profile

Surface cover: Stones and boulders, 35 percent; cobbles, 5 percent; pebbles, 10 percent

Depth: 0 to 8 inches
Texture: Extremely bouldery coarse sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 41 inches
Texture: Very stony sandy clay loam
Structure: Massive
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 41 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 3.4 to 5.0 inches
Water-supplying capacity: 14 to 16 inches
Runoff: Rapid
Hydrologic group: B
Erosion factors (surface layer): K value—.05; T value—3; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Characteristics of the Rock Outcrop

Position on landscape: Crests and back slopes of mountains
Kind of rock: Granite

Contrasting Inclusions

Inclusion 1
Classification: Lithic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Crests and shoulders of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass

Inclusion 2
Classification: Argic Pachic Cryoborolls, loamy, mixed

Position on landscape: The lower, concave back slopes and toe slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, snowberry, mountain brome

Inclusion 3
Classification: Cumulic Cryoborolls
Position on landscape: Toe slopes and summits of mountains, adjacent to seeps
Distinctive present vegetation: Rubber rabbitbrush, rush, sedge

Inclusion 4
Classification: Cumulic Cryoborolls
Position on landscape: Concave back slopes of mountains, adjacent to seeps
Distinctive present vegetation: Quaking aspen, snowberry, mountain brome

Interpretive Groups

Capability classification: Hastee and Granipeak soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Hastee soil—023XY019NV; Granipeak soil—023XY050NV; Rock outcrop—none; Inclusion 1—023XY008NV; Inclusion 2—023XY019NV; Inclusion 3—023XY025NV; Inclusion 4—023XY028NV

1510—Greenbrae fine sandy loam, 4 to 15 percent slopes

Map Unit Setting

Position on landscape: Alluvial fans

Composition

Major component:
• Greenbrae fine sandy loam, 4 to 15 percent slopes—85 percent
Contrasting inclusions:
• Inclusion 1: Xerollic Haplargids stony sandy loam, 4 to 15 percent slopes—9 percent
• Inclusion 2: Berit extremely bouldery coarse sandy loam, 15 to 50 percent slopes—5 percent
• Inclusion 3: Rock outcrop—1 percent

Characteristics of the Greenbrae Soil

Classification: Xerollic Haplargids, fine-loamy, mixed, mesic
Position on landscape: Alluvial fans
Parent material: Granitic alluvium
Slope range: 4 to 15 percent
Elevation: 5,100 to 5,400 feet
Dominant present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass, bluebunch wheatgrass

Climatic Data

Average annual precipitation: About 10 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Pebbles, 25 percent

Depth: 0 to 6 inches
Texture: Fine sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 30 inches
Texture: Clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 30 to 60 inches
Texture: Loam
Structure: Massive
Consistence: Hard, friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 6.0 to 7.0 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—moderate
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic
Position on landscape: Pediments adjacent to alluvial fans
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Inclusion 2
Classification: Xerollic Haplargids, loamy-skeletal, mixed, mesic, shallow
Position on landscape: Hills adjacent to alluvial fans
Distinctive present vegetation: Utah juniper, purple sage, mountain big sagebrush
Inclusion 3
Position on landscape: Pediments and hills adjacent to alluvial fans
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Greenbrae soil—IVe, irrigated; VIs, nonirrigated
Range site: Greenbrae soil—023XY020NV; Inclusion 1—023XY037NV; Inclusion 2—023XY036NV; Inclusion 3—none

1520—Kaffur-Slocave-Rock outcrop association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Kaffur very stony sandy loam, 30 to 75 percent slopes—50 percent
• Slocave very stony sandy loam, 30 to 75 percent slopes—25 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents stony sandy loam, 30 to 75 percent slopes—5 percent
• Inclusion 2: Ceejay very stony sandy loam, 4 to 30 percent slopes—4 percent
• Inclusion 3: Lithic Torriorthents stony sandy loam, 15 to 50 percent slopes—1 percent

Characteristics of the Kaffur Soil

Classification: Xeric Torriorthents, loamy-skeletal, mixed (calcareous), mesic, shallow
Position on landscape: North-facing side slopes of mountains at the middle and upper elevations
Parent material: Residuum and colluvium derived from granite
Slope range: 30 to 75 percent
Elevation: 4,800 to 5,800 feet
Dominant present vegetation: Utah juniper, Lahontan sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 90 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 1 inch
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 4 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 21 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 10 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 0.2 to 0.7 inch
Water-supplying capacity: 7 to 9 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Slocave Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic, shallow
Position on landscape: The lower and upper, south-facing side slopes of mountains
Parent material: Residuum and colluvium derived from granite
Slope range: 30 to 75 percent
Elevation: 4,800 to 5,800 feet
Dominant present vegetation: Littleleaf horsebrush, shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 5 percent

Depth: 0 to 1 inch
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 1 to 7 inches
Texture: Very gravelly coarse sandy loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 7 to 27 inches
Texture: Weathered bedrock

Depth: 27 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 14 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 0.3 to 1.0 inch
Water-supplying capacity: 4 to 6 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.10; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Rock Outcrop

Position on landscape: Side slopes of mountains
Kind of rock: Granite

Contrasting Inclusions

Inclusion 1

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Toe slopes of mountains
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2

Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Crests and shoulders of volcanic hills
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Inclusion 3

Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower hills at the north end of the Fox Range
Distinctive present vegetation: Shadscale, desert needlegrass

Interpretive Groups

Capability classification: Kaffur and Slocave soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Kaffur soil—023XY063NV; Slocave soil—027XY017NV; Rock outcrop—none; Inclusion 1—024XY002NV; Inclusion 2—023XY047NV; Inclusion 3—027XY027NV

1530—Coppereid-Kreza association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
- Coppereid very gravelly sandy loam, 15 to 50 percent slopes, eroded—40 percent
- Coppereid very gravelly sandy loam, 15 to 50 percent slopes—25 percent
- Kreza gravelly loam, 4 to 30 percent slopes—20 percent

Contrasting inclusions:
- Inclusion 1: Jaybee cobbly sandy loam, 4 to 30 percent slopes—6 percent
- Inclusion 2: Sojur extremely channery loam, 30 to 75 percent slopes—5 percent
- Inclusion 3: Rock outcrop—3 percent
- Inclusion 4: Xeric Torriorthents very gravelly loam, 2 to 8 percent slopes—1 percent

Characteristics of the Eroded Coppereid Soil

Classification: Xeric Torriorthents, loamy, mixed (calcareous), mesic, shallow
Position on landscape: Slightly convex back slopes of mountains
Parent material: Residuum and colluvium derived from shale

Slope range: 15 to 50 percent
Elevation: 4,400 to 5,900 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 40 percent

Depth: 0 to 2 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 6 inches
Texture: Gravelly loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 5 to 10 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.7 to 1.5 inches
Water-supplying capacity: 6 to 8 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Uneroded Coppereid Soil

Classification: Xeric Torriorthents, loamy, mixed (calcareous), mesic, shallow
Position on landscape: Convex back slopes of mountains
Parent material: Residuum and colluvium derived from shale

Slope range: 15 to 50 percent
Elevation: 4,400 to 5,900 feet
Dominant present vegetation: Utah juniper, Lahontan sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 60 percent

Depth: 0 to 2 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 9 inches
Texture: Gravelly loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 9 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 5 to 10 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.7 to 1.5 inches
Water-supplying capacity: 6 to 8 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Kreza Soil

Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Crests and shoulders of mountains
Parent material: Residuum and colluvium derived from shale

Slope range: 4 to 30 percent
Elevation: 4,400 to 5,900 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Pebbles, 30 percent

Depth: 0 to 1 inch
Texture: Gravelly loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 5 inches
Texture: Gravelly loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 10 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.5 to 1.2 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—6
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Lithic Xerollic Haplargids, loamy, mixed, mesic
Position on landscape: Crests and shoulders of mountains of volcanic rock
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower, south- and west-facing back slopes of hills and mountains
Distinctive present vegetation: Shadscale, desert needlegrass
Inclusion 3
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None
Inclusion 4
Classification: Xeric Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Channels cut into toe slopes of mountains
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage

Interpretive Groups

Capability classification: Coppereid and Kreza soils—VIIs, nonirrigated
Range site: The eroded Coppereid soil—023XY047NV; the uneroded Coppereid soil—023XY063NV; Kreza soil—023XY047NV; Inclusion 1—023XY047NV; Inclusion 2—027XY027NV; Inclusion 3—none; Inclusion 4—027XY029NV

1540—Foxcan-Sojur-Rock outcrop association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Foxcan very gravelly loam, 50 to 75 percent slopes—40 percent
• Sojur extremely channery loam, 50 to 75 percent slopes—30 percent
• Rock outcrop—15 percent
Contrasting inclusions:
• Inclusion 1: Coppereid very gravelly loam, 8 to 50 percent slopes—6 percent
• Inclusion 2: Sojur extremely channery loam, 15 to 50 percent slopes—4 percent
• Inclusion 3: Foxcan very gravelly loam, 15 to 50 percent slopes—3 percent
• Inclusion 4: Xeric Torriorthents very gravelly loam, 2 to 15 percent slopes—2 percent

Characteristics of the Foxcan Soil

Classification: Xeric Torriorthents, loamy, mixed (calcareous), mesic, shallow
Position on landscape: North-facing back slopes of mountains at the middle and upper elevations
Parent material: Residuum and colluvium derived from shale
Slope range: 50 to 75 percent
Elevation: 5,000 to 6,000 feet
Dominant present vegetation: Utah juniper, purple sage, mountain big sagebrush

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 90 days

Typical Profile

Surface cover: Stones and boulders, 1 percent; cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 1 inch
Texture: Very gravelly loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 1 to 5 inches
Texture: Gravelly loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 5 to 21 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 10 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 0.3 to 1.1 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—6
Hazard of erosion: By water—high; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Sojur Soil

Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The lower back slopes and the upper, south-facing back slopes of mountains at middle elevations
Parent material: Residuum and colluvium derived from shale
Slope range: 50 to 75 percent
Elevation: 4,400 to 5,000 feet
Dominant present vegetation: Shadscale, desert needlegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 4 inches
Texture: Extremely channery loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 4 to 15 inches
Texture: Weathered bedrock

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 4 to 10 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 0.2 to 0.8 inch
Water-supplying capacity: 3 to 5 inches
Runoff: Very rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Rock Outcrop

Position on landscape: Summits and side slopes of mountains
Kind of rock: Shale

Contrasting Inclusions

Inclusion 1
Classification: Xeric Torriorthents, loamy, mixed (calcareous), mesic, shallow
Position on landscape: Shoulders and back slopes of mountains
Distinctive present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail
Inclusion 2
Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Side slopes of mountains
Distinctive present vegetation: Shadscale, desert needlegrass
Inclusion 3
Classification: Xeric Torriorthents, loamy, mixed (calcareous), mesic, shallow
Position on landscape: Side slopes of mountains
Distinctive present vegetation: Utah juniper, purple sage, mountain big sagebrush
Inclusion 4
Classification: Xeric Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Channels
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage

Interpretive Groups

Capability classification: Foxcan and Sojur soils—VIIs, nonirrigated; Rock outcrop—VIIIs
Range site: Foxcan soil—023XY036NV; Sojur soil—027XY027NV; Rock outcrop—none; Inclusion 1—023XY047NV; Inclusion 2—027XY027NV; Inclusion 3—023XY036NV; Inclusion 4—027XY029NV

1550—Wylo-Ister association

Map Unit Setting

Position on landscape: Mountains

Composition

Major components:
• Wylo very stony loam, 30 to 50 percent slopes—55 percent
• Ister very stony loam, 30 to 50 percent slopes—30 percent
Contrasting inclusions:
• Inclusion 1: Aridic Argixerolls stony loam, 30 to 50 percent slopes—6 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Lithic Xerollic Haplargids stony loam, 4 to 30 percent slopes—3 percent
• Inclusion 4: Skedaddle stony loam, 30 to 75 percent slopes—2 percent

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex shoulders and back slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 6,000 to 7,600 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Ister Soil

Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Slightly concave, north- and east-facing back slopes of mountains
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 30 to 50 percent
Elevation: 6,000 to 7,600 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 15 percent; pebbles, 35 percent

Depth: 0 to 6 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 29 inches
Texture: Very stony clay loam
Structure: Subangular blocky
Consistence: Hard, friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 29 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderately slow
Available water capacity: 2.7 to 4.3 inches
Water-supplying capacity: 10 to 12 inches
Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, loamy-skeletal, mixed, frigid
Position on landscape: Concave back slopes of mountains
Distinctive present vegetation: Mountain big sagebrush, bluebunch wheatgrass, basin wildrye
Inclusion 2
Position on landscape: Crests and side slopes of mountains
Distinctive present vegetation: None
Inclusion 3
Classification: Lithic Xerollic Haplargids, loamy-skeletal, mixed, frigid
Position on landscape: Convex crests of mountains
Distinctive present vegetation: Low sagebrush, Sandberg bluegrass, Hooker balsamroot
Inclusion 4
Classification: Lithic Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: Convex back slopes of mountains
Distinctive present vegetation: Purple sage, littleleaf horsebrush, desert needlegrass, bluebunch wheatgrass

Interpretive Groups

Capability classification: Wylo and Ister soils—VIIs, nonirrigated
Range site: Wylo soil—023XY037NV; Ister soil—023XY039NV; Inclusion 1—023XY041NV; Inclusion 2—none; Inclusion 3—023XY021NV; Inclusion 4—023XY030NV

1552—Wylo-Bucklake association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Wylo very stony loam, 4 to 30 percent slopes—70 percent
• Bucklake very stony loam, 15 to 30 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Pickup very stony loam, 15 to 50 percent slopes—5 percent
• Inclusion 2: Rock outcrop—4 percent
• Inclusion 3: Lithic Xeric Torriorthents gravelly sandy loam, 15 to 50 percent slopes—3 percent
• Inclusion 4: Xeric Torriorthents very gravelly loamy sand, 2 to 15 percent slopes—3 percent

Characteristics of the Wylo Soil

Classification: Lithic Argixerolls, clayey, montmorillonitic, mesic
Position on landscape: Summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 4 to 30 percent
Elevation: 4,400 to 5,600 feet
Dominant present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 48 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 5 percent; pebbles, 45 percent

Depth: 0 to 4 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 15 inches
Texture: Gravelly clay loam, gravelly clay
Structure: Prismatic parting to angular blocky
Consistence: Very hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 15 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Rapid
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Characteristics of the Bucklake Soil

Classification: Aridic Argixerolls, fine, montmorillonitic, mesic
Position on landscape: South- and west-facing side slopes of plateaus
Parent material: Residuum and colluvium derived from basalt or andesite
Slope range: 15 to 30 percent
Elevation: 4,400 to 5,600 feet
Dominant present vegetation: Mountain big sagebrush, bluebunch wheatgrass, Thurber needlegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 47 degrees F
Frost-free period: About 85 days

Typical Profile

Surface cover: Stones and boulders, 7 percent; cobbles, 10 percent; pebbles, 20 percent

Depth: 0 to 8 inches
Texture: Very stony loam
Structure: Subangular blocky
Consistence: Soft, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 8 to 12 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 12 to 24 inches
Texture: Gravelly clay loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 24 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 2.9 to 5.8 inches
Water-supplying capacity: 10 to 12 inches

Runoff: Rapid
Hydrologic group: C
Erosion factors (surface layer): K value—.15; T value—2; wind erodibility group—8
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Aridic Argixerolls, clayey-skeletal, montmorillonitic, mesic
Position on landscape: North-facing side slopes of plateaus
Distinctive present vegetation: Lahontan sagebrush, bluebunch wheatgrass, Hooker balsamroot
Inclusion 2
Position on landscape: Rims of plateaus
Distinctive present vegetation: None
Inclusion 3
Classification: Lithic Xeric Torriorthents, loamy, mixed, nonacid, mesic
Position on landscape: Convex back slopes of plateaus
Distinctive present vegetation: Utah juniper, Lahontan sagebrush, bottlebrush squirreltail
Inclusion 4
Classification: Xeric Torriorthents, loamy-skeletal, mixed, nonacid, mesic
Position on landscape: Channels cut into slopes of plateaus
Distinctive present vegetation: Big sagebrush, rabbitbrush, spiny hopsage

Interpretive Groups

Capability classification: Wylo and Bucklake soils—VIIs, nonirrigated
Range site: Wylo soil—023XY037NV; Bucklake soil—023XY039NV; Inclusion 1—023XY037NV; Inclusion 2—none; Inclusion 3—023XY063NV; Inclusion 4—027XY029NV

1560—Manogue-Ceejay association

Map Unit Setting

Position on landscape: Plateaus

Composition

Major components:
• Manogue very cobbly clay, 0 to 8 percent slopes—45 percent
• Ceejay very stony loam, 4 to 15 percent slopes—45 percent

Contrasting inclusions:
• Inclusion 1: Rock outcrop—5 percent
• Inclusion 2: Tunnison cobbly clay, 0 to 8 percent slopes—5 percent

Characteristics of the Manogue Soil

Classification: Entic Chromoxererts, fine, montmorillonitic, mesic
Position on landscape: Slightly concave summits of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 0 to 8 percent
Elevation: 4,400 to 5,600 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 1 percent; cobbles, 40 percent; pebbles, 10 percent

Depth: 0 to 4 inches
Texture: Very cobbly clay
Structure: Granular
Consistence: Hard, very firm
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 4 to 25 inches
Texture: Clay
Structure: Prismatic
Consistence: Very hard, very firm
Reaction: Mildly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 25 to 47 inches
Texture: Clay
Structure: Prismatic
Consistence: Hard, firm
Reaction: Moderately alkaline
Salinity: 2 to 8 mmhos per cm
Sodicity: SAR less than 2

Depth: 47 inches
Texture: Weathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 40 to 60 inches

Frequency of flooding: None
Permeability: Very slow
Available water capacity: 5.6 to 8.3 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—3; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Ceejay Soil

Classification: Lithic Xerollic Haplargids, clayey, montmorillonitic, mesic
Position on landscape: Slightly convex summits and shoulders of plateaus
Parent material: Residuum and colluvium derived from basalt
Slope range: 4 to 15 percent
Elevation: 4,400 to 5,600 feet
Dominant present vegetation: Lahontan sagebrush, Sandberg bluegrass, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 9 inches
Average annual air temperature: About 49 degrees F
Frost-free period: About 100 days

Typical Profile

Surface cover: Stones and boulders, 10 percent; cobbles, 10 percent; pebbles, 40 percent

Depth: 0 to 2 inches
Texture: Very stony loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 2 to 16 inches
Texture: Cobbly clay, cobbly clay loam
Structure: Prismatic parting to angular blocky
Consistence: Hard, friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 16 inches
Texture: Unweathered bedrock

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 14 to 20 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 1.8 to 2.6 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.15; T value—1; wind erodibility group—7
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Position on landscape: Rims of plateaus
Distinctive present vegetation: None
Inclusion 2
Classification: Entic Chromoxererts, very fine, montmorillonitic, mesic
Position on landscape: Concave summits of plateaus
Distinctive present vegetation: Rubber rabbitbrush, bottlebrush squirreltail, Hooker balsamroot

Interpretive Groups

Capability classification: Manogue and Ceejay soils—VIIs, nonirrigated
Range site: Manogue soil—023XY047NV; Ceejay soil—023XY047NV; Inclusion 1—none; Inclusion 2—023XY001NV

1570—Espil gravelly sandy loam, 2 to 15 percent slopes

Map Unit Setting

Position on landscape: Fan piedmont remnants

Composition

Major component:
• Espil gravelly sandy loam, 2 to 15 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Aridic Durixerolls gravelly loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Leviathan very gravelly sandy loam, 2 to 8 percent slopes—5 percent

Characteristics of the Espil Soil

Classification: Aridic Durixerolls, loamy, mixed, frigid, shallow
Position on landscape: Summits and shoulders of convex fan piedmont remnants
Parent material: Alluvium derived from volcanic rocks

Slope range: 2 to 15 percent
Elevation: 5,500 to 6,000 feet
Dominant present vegetation: Low sagebrush, Sandberg bluegrass

Climatic Data

Average annual precipitation: About 11 inches
Average annual air temperature: About 44 degrees F
Frost-free period: About 80 days

Typical Profile

Surface cover: Pebbles, 60 percent

Depth: 0 to 7 inches
Texture: Gravelly sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 7 to 10 inches
Texture: Clay
Structure: Prismatic parting to angular blocky
Consistence: Hard, friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 14 inches
Texture: Indurated hardpan

Depth: 14 to 60 inches
Texture: Cemented hardpan

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to a hardpan: 8 to 14 inches
Frequency of flooding: None
Permeability: Very slow
Available water capacity: 0.8 to 1.3 inches
Water-supplying capacity: 9 to 11 inches
Runoff: Medium
Hydrologic group: D
Erosion factors (surface layer): K value—.20; T value—1; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—moderate; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Aridic Durixerolls, clayey, montmorillonitic, mesic, shallow
Position on landscape: Concave fan piedmont remnants
Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Inclusion 2
Classification: Aridic Argixerolls, loamy-skeletal, mixed, mesic
Position on landscape: Inset fans
Distinctive present vegetation: Mountain big sagebrush, bottlebrush squirreltail, Thurber needlegrass

Interpretive Groups

Capability classification: Espil soil—VIIs, nonirrigated
Range site: Espil soil—023XY031NV; Inclusion 1—023XY020NV; Inclusion 2—023XY020NV

1580—Trocken-Ganaflan-Bluewing association

Map Unit Setting

Position on landscape: Lake plain terraces, alluvial fans, and inset fans

Composition

Major components:
• Trocken very gravelly sandy loam, 4 to 15 percent slopes—45 percent
• Ganaflan gravelly loam, 4 to 15 percent slopes—25 percent
• Bluewing very gravelly loamy sand, 4 to 15 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Veta stony sandy loam, 2 to 15 percent slopes—6 percent
• Inclusion 2: Rock outcrop—3 percent
• Inclusion 3: Ruhe gravelly loamy sand, 4 to 15 percent slopes—3 percent
• Inclusion 4: Smaug very fine sandy loam, 4 to 15 percent slopes—3 percent

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The higher lake plain terraces and alluvial fans
Parent material: Mixed alluvium
Slope range: 4 to 15 percent
Elevation: 4,000 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Pebbles, 40 percent

Depth: 0 to 3 inches
Texture: Very gravelly sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 2.4 to 3.6 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.10; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Ganaflan Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: The middle lake plain terraces adjacent to tufa outcrops
Parent material: Mixed lacustrine sediments and residuum derived from tufa
Slope range: 4 to 15 percent
Elevation: 4,000 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 30 percent

Depth: 0 to 4 inches
Texture: Gravelly loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR less than 13

Depth: 4 to 32 inches
Texture: Gravelly loam
Structure: Massive
Consistence: Hard, friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR less than 13

Depth: 32 to 48 inches
Texture: Unweathered bedrock

Depth: 48 to 60 inches
Texture: Stratified sand and gravelly sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Depth to bedrock: 20 to 40 inches
Frequency of flooding: None
Permeability: Moderate
Available water capacity: 2.5 to 3.5 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: C
Erosion factors (surface layer): K value—.28; T value—2; wind erodibility group—5
Hazard of erosion: By water—moderate; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—moderate
Potential for frost action: Low

Characteristics of the Bluewing Soil

Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Alluvial fans and inset fans
Parent material: Mixed alluvium
Slope range: 4 to 15 percent
Elevation: 4,000 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches

Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 35 percent

Depth: 0 to 7 inches
Texture: Very gravelly loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 7 to 60 inches
Texture: Stratified very gravelly coarse sand to extremely gravelly sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Very rapid
Available water capacity: 2.4 to 3.7 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.10; T value—5; wind erodibility group—4
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Alluvial fans
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 2
Position on landscape: Lake plains
Distinctive present vegetation: None
Inclusion 3
Classification: Typic Torripsamments, mixed, mesic, shallow
Position on landscape: Lake plain terraces adjacent to tufa outcrops
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass
Inclusion 4
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Trocken, Ganaflan, and Bluewing soils—VIIs, nonirrigated
Range site: Trocken soil—027XY013NV; Ganaflan soil—027XY013NV; Bluewing soil—027XY013NV; Inclusion 1—023XY038NV; Inclusion 2—none; Inclusion 3—027XY009NV; Inclusion 4—024XY004NV

1581—Trocken-Mazuma-Hawsley association

Map Unit Setting

Position on landscape: Alluvial fans, lake plain terraces, and sand sheets

Composition

Major components:
• Trocken very stony sandy loam, 2 to 8 percent slopes—40 percent
• Mazuma fine sandy loam, 2 to 8 percent slopes—30 percent
• Hawsley fine sand, 2 to 8 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Isolde fine sand, 4 to 15 percent slopes—5 percent
• Inclusion 2: Veta very stony sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 3: Durixerollic Camborthids very fine sandy loam, 2 to 8 percent slopes—5 percent

Characteristics of the Trocken Soil

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Convex alluvial fans, predominantly at the middle and upper elevations
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches

Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Stones and boulders, 5 percent; cobbles, 5 percent; pebbles, 20 percent

Depth: 0 to 3 inches
Texture: Very stony sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 3 to 60 inches
Texture: Stratified very gravelly coarse sandy loam to gravelly loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Moderately alkaline
Salinity: 2 to 4 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderate
Available water capacity: 3.0 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.20; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Broad crests of dissected lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Hawsley Soil

Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on alluvial fans and lake terraces
Parent material: Mixed alluvium and water-reworked sandy eolian deposits
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline

Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 8 to 42 inches
Texture: Stratified fine sand and sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline or strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 42 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.6 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—1
Hazard of erosion: By water—slight; by wind—high
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Dunes
Distinctive present vegetation: Black greasewood, Indian ricegrass
Inclusion 2
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Inset fans
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail
Inclusion 3
Classification: Durixerollic Camborthids, coarse-loamy, mixed, mesic
Position on landscape: Inset fans and side slopes of lake plain terraces adjacent to channels
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Mazuma soil—IIIe, Hawsley soil—IVs, irrigated; Trocken and Hawsley soils—VIIs, Mazuma soil—VIIc, nonirrigated
Range site: Trocken soil—024XY002NV; Mazuma soil—024XY002NV; Hawsley soil—027XY009NV; Inclusion 1—027XY016NV; Inclusion 2—023XY038NV; Inclusion 3—023XY038NV

1590—Typic Torriorthents-Ragtown association

Map Unit Setting

Position on landscape: Lake plain terraces

Composition

Major components:
• Typic Torriorthents very gravelly coarse sand, 4 to 15 percent slopes—60 percent
• Ragtown silty clay loam, 0 to 2 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Typic Torriorthents very stony sand, 2 to 8 percent slopes—8 percent
• Inclusion 2: Umberland silty clay loam, 0 to 2 percent slopes—3 percent
• Inclusion 3: Typic Haplaquolls silt loam, 0 to 2 percent slopes—2 percent
• Inclusion 4: Rock outcrop—2 percent

Characteristics of the Typic Torriorthents

Classification: Typic Torriorthents
Position on landscape: The middle lake plain terraces
Parent material: Water-reworked alluvium
Slope range: 4 to 15 percent
Elevation: 3,800 to 4,100 feet
Dominant present vegetation: Rabbitbrush, black greasewood, inland saltgrass, Indian ricegrass, seepweed, desert needlegrass

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Surface cover: Cobbles, 20 percent; pebbles, 60 percent

Depth: 0 to 5 inches
Texture: Very gravelly coarse sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Depth: 5 to 60 inches
Texture: Extremely gravelly sand, gravelly sand
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 13

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Rapid
Available water capacity: 1.8 to 2.7 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: A
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Characteristics of the Ragtown Soil

Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Parent material: Lacustrine sediments
Slope range: 0 to 2 percent
Elevation: 3,800 to 4,100 feet
Dominant present vegetation: Black greasewood, seepweed, shadscale

Climatic Data

Average annual precipitation: About 6 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 10 inches
Texture: Silty clay loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 23

Depth: 10 to 23 inches
Texture: Clay loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Depth: 23 to 60 inches
Texture: Clay
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: More than 16 mmhos per cm
Sodicity: SAR more than 68

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 9.7 to 11.3 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: C
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Fan aprons adjacent to lake plain terraces
Distinctive present vegetation: Black greasewood, shadscale, Indian ricegrass, inland saltgrass
Inclusion 2
Classification: Aeric Halaquepts, fine, montmorillonitic (calcareous), mesic
Position on landscape: The lower lake plain terraces
Distinctive present vegetation: Alkali bluegrass, alkali sacaton, Baltic rush
Inclusion 3
Classification: Typic Haplaquolls, fine-silty, mixed (calcareous), mesic
Position on landscape: The lower lake plain terraces adjacent to seeps
Distinctive present vegetation: Nevada bluegrass, meadow barley
Inclusion 4
Position on landscape: Lake plains
Distinctive present vegetation: None

Interpretive Groups

Capability classification: Typic Torriorthents and Ragtown soil—VIIs, nonirrigated
Range site: Typic Torriorthents—none; Ragtown soil—027XY025NV; Inclusion 1—none; Inclusion 2—

024XY043NV; Inclusion 3—026XY003NV; Inclusion 4—none

1600—Dithod loam

Map Unit Setting

Position on landscape: Stream terraces

Composition

Major component:
• Dithod loam, 0 to 2 percent slopes—90 percent
Contrasting inclusions:
• Inclusion 1: Fluvaquents very gravelly loamy coarse sand, 0 to 2 percent slopes—7 percent
• Inclusion 2: Veta gravelly sandy loam, 0 to 2 percent slopes—3 percent

Characteristics of the Dithod Soil

Classification: Fluvaquentic Haploxerolls, fine-loamy, mixed, mesic
Position on landscape: Stream terraces
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 4,300 to 4,400 feet
Dominant present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 15 percent

Depth: 0 to 10 inches
Texture: Loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 40 inches
Texture: Stratified fine sandy loam to loam
Structure: Prismatic
Consistence: Hard, friable
Reaction: Neutral to moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 40 to 60 inches
Texture: Sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Flooding: Frequency—occasional; duration—very brief; months—November through June
Permeability: Moderately slow
Available water capacity: 8.0 to 9.0 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Contrasting Inclusions

Inclusion 1
Classification: Fluvaquents
Position on landscape: Stream channels
Distinctive present vegetation: Willow, cottonwood, basin big sagebrush
Inclusion 2
Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: Fanlettes adjacent to lake plain terraces
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Dithod soil—IIw, irrigated; VIw, nonirrigated
Range site: Dithod soil—023XY005NV; Inclusion 1—023XY034NV; Inclusion 2—023XY038NV

1601—Dithod-Fluvaquents association

Map Unit Setting

Position on landscape: Stream terraces and stream channels

Composition

Major components:
• Dithod loam, 0 to 2 percent slopes—65 percent
• Fluvaquents very gravelly coarse sand, 0 to 4 percent slopes—25 percent
Contrasting inclusions:
• Inclusion 1: Cumulic Haploxerolls gravelly loam, 2 to 8 percent slopes—8 percent

• Inclusion 2: Typic Torriorthents very gravelly sandy loam, 2 to 8 percent slopes—2 percent

Characteristics of the Dithod Soil

Classification: Fluvaquentic Haploxerolls, fine-loamy, mixed, mesic
Position on landscape: Stream terraces
Parent material: Mixed alluvium
Slope range: 0 to 2 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Basin big sagebrush, black greasewood, basin wildrye

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 15 percent

Depth: 0 to 10 inches
Texture: Loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 10 to 40 inches
Texture: Stratified fine sandy loam to loam
Structure: Prismatic
Consistence: Hard, friable
Reaction: Neutral to moderately alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 2

Depth: 40 to 60 inches
Texture: Sand
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Neutral
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Flooding: Frequency—occasional; duration—very brief; months—November through June
Permeability: Moderately slow
Available water capacity: 8.0 to 9.0 inches
Water-supplying capacity: 12 to 14 inches
Runoff: Very slow
Hydrologic group: B
Erosion factors (surface layer): K value—.32; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Moderate
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Fluvaquents

Classification: Fluvaquents
Position on landscape: Stream channels
Parent material: Mixed alluvium
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,400 feet
Dominant present vegetation: Willow, cottonwood, basin big sagebrush

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Cobbles, 5 percent; pebbles, 50 percent

Depth: 0 to 6 inches
Texture: Very gravelly coarse sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 60 inches
Texture: Stratified very gravelly coarse sand to clay loam
Structure: Massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Flooding: Frequency—frequent; duration—brief or long; months—December through August
Permeability: Moderate
Available water capacity: 2.3 to 5.7 inches
Water-supplying capacity: 14 to 18 inches
Runoff: Slow
Hydrologic group: D
Erosion factors (surface layer): K value—.05; T value—5; wind erodibility group—8
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low

Corrosivity: Steel—high; concrete—low
Potential for frost action: High

Contrasting Inclusions

Inclusion 1
Classification: Cumulic Haploxerolls, fine-loamy, mixed, mesic
Position on landscape: Stream terraces
Distinctive present vegetation: Basin big sagebrush, basin wildrye
Inclusion 2
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Fanlettes adjacent to stream terraces
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush

Interpretive Groups

Capability classification: Dithod soil—IIw, irrigated; Dithod soil—VIw, Fluvaquents—VIIw, nonirrigated
Range site: Dithod soil—023XY005NV; Fluvaquents—023XY034NV; Inclusion 1—023XY009NV; Inclusion 2—024XY003NV

1620—Mazuma-Hawsley association

Map Unit Setting

Position on landscape: Lake plain terraces, lagoons, and sand sheets

Composition

Major components:
• Mazuma very fine sandy loam, 4 to 8 percent slopes—50 percent
• Mazuma fine sandy loam, 0 to 4 percent slopes—20 percent
• Hawsley loamy sand, 4 to 15 percent slopes—15 percent
Contrasting inclusions:
• Inclusion 1: Trocken gravelly sandy loam, 2 to 4 percent slopes—4 percent
• Inclusion 2: Duric Camborthids loam, 2 to 15 percent slopes—4 percent
• Inclusion 3: Duric Camborthids fine sandy loam, 8 to 30 percent slopes—4 percent
• Inclusion 4: Typic Torriorthents silt loam, 2 to 8 percent slopes—3 percent

Characteristics of the Mazuma Soil, 4 to 8 Percent Slopes

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Smooth to slightly concave lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 4 to 8 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Very fine sandy loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.43; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Mazuma Soil, 0 to 4 Percent Slopes

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Smooth to slightly concave lagoons and lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,200 feet

Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Hawsley Soil

Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheet superimposed on lake plain terraces
Parent material: Mixed alluvium and water-reworked eolian deposits
Slope range: 4 to 15 percent
Elevation: 3,900 to 4,200 feet
Dominant present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Loamy sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 8 to 42 inches
Texture: Stratified fine sand and sand
Structure: Single grained
Consistence: Loose
Reaction: Moderately alkaline or strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Depth: 42 to 60 inches
Texture: Fine sand
Structure: Single grained
Consistence: Loose
Reaction: Strongly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 6

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Very rapid
Available water capacity: 3.6 to 4.8 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Very slow
Hydrologic group: A
Erosion factors (surface layer): K value—.15; T value—5; wind erodibility group—2
Hazard of erosion: By water—slight; by wind—moderate
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1

Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The upper lake plain terraces
Distinctive present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail

Inclusion 2

Classification: Duric Camborthids, sandy-skeletal, mixed, mesic
Position on landscape: Summits and side slopes of offshore-bars adjacent to lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 3
Classification: Duric Camborthids, coarse-loamy, mixed, mesic
Position on landscape: The middle side slopes of fan piedmont remnants adjacent to lake plain terraces
Distinctive present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail
Inclusion 4
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Dissected beach terrace remnants adjacent to lake plain terraces and lagoons
Distinctive present vegetation: Bud sagebrush, winterfat, shadscale, bottlebrush squirreltail

Interpretive Groups

Capability classification: Mazuma soil, 4 to 8 percent slopes—IIIe, Mazuma soil, 0 to 4 percent slopes—IIe, Hawsley soil—IVs, irrigated; Mazuma soils—VIIc, Hawsley soil—VIIs, nonirrigated
Range site: Mazuma soil, 4 to 8 percent slopes—024XY002NV; Mazuma soil, 0 to 4 percent slopes—024XY002NV; Hawsley soil—027XY009NV; Inclusion 1—024XY014NV; Inclusion 2—024XY002NV; Inclusion 3—024XY014NV; Inclusion 4—024XY014NV

1621—Mazuma, clayey substratum association

Map Unit Setting

Position on landscape: Lake plain terrace remnants

Composition

Major components:
• Mazuma fine sandy loam, 2 to 8 percent slopes—65 percent
• Mazuma loam, 0 to 4 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Smaug very fine sandy loam, 2 to 15 percent slopes—7 percent
• Inclusion 2: Ganaflan gravelly loam, 2 to 8 percent slopes—4 percent
• Inclusion 3: Ragtown very fine sandy loam, 0 to 2 percent slopes—2 percent
• Inclusion 4: Xeric Torriorthents sandy loam, 2 to 8 percent slopes—2 percent

Characteristics of Mazuma Fine Sandy Loam

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Slightly convex or smooth lake plain terrace remnants
Parent material: Loamy lacustrine material
Slope range: 2 to 8 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of Mazuma Loam, Clayey Substratum

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Slightly concave, lake plain terrace remnants at the lower elevations
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 3,900 to 4,000 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Loam
Structure: Platy
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 6

Depth: 8 to 40 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 30

Depth: 40 to 60 inches
Texture: Stratified silty clay loam to clay
Structure: Massive
Consistence: Hard, friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 30

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Slow
Available water capacity: 7.4 to 8.6 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: C
Erosion factors (surface layer): K value—.37; T value—4; wind erodibility group—4L
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: High
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Beach terraces adjacent to lake plain terrace remnants at the higher elevations
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 3
Classification: Typic Torriorthents, fine, montmorillonitic (calcareous), mesic
Position on landscape: Lake plain terraces at the lowest elevations
Distinctive present vegetation: Shadscale, black greasewood, bud sagebrush

Inclusion 4
Classification: Xeric Torriorthents, sandy-skeletal, mixed, mesic
Position on landscape: Channels cut into lake plain terrace remnants
Distinctive present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Interpretive Groups

Capability classification: Mazuma fine sandy loam—IIIe, irrigated; Mazuma soils—VIIc, nonirrigated
Range site: Mazuma fine sandy loam—024XY002NV; Mazuma loam, clayey substratum—024XY002NV; Inclusion 1—024XY004NV; Inclusion 2—024XY002NV; Inclusion 3—024XY003NV; Inclusion 4—024XY020NV

1630—Veta-Mazuma association

Map Unit Setting

Position on landscape: Alluvial fans, lake plain terraces, and fan skirts

Composition

Major components:
• Veta very gravelly sandy loam, 2 to 8 percent slopes—45 percent
• Mazuma fine sandy loam, 2 to 8 percent slopes—20 percent
• Mazuma fine sandy loam, 0 to 4 percent slopes—20 percent
Contrasting inclusions:
• Inclusion 1: Trocken very gravelly sandy loam, 2 to 8 percent slopes—5 percent
• Inclusion 2: Smaug very fine sandy loam, 2 to 8 percent slopes—4 percent
• Inclusion 3: Hawsley fine sand, 2 to 8 percent slopes—3 percent
• Inclusion 4: Lithic Torriorthents very stony sandy loam, 8 to 30 percent slopes—3 percent

Characteristics of the Veta Soil

Classification: Xerollic Camborthids, loamy-skeletal, mixed, mesic
Position on landscape: The higher alluvial fans
Parent material: Mixed alluvium
Slope range: 2 to 8 percent
Elevation: 4,100 to 4,400 feet
Dominant present vegetation: Wyoming big sagebrush, spiny hopsage, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 8 inches
Average annual air temperature: About 50 degrees F
Frost-free period: About 110 days

Typical Profile

Surface cover: Pebbles, 45 percent

Depth: 0 to 6 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 6 to 18 inches
Texture: Very gravelly sandy loam
Structure: Subangular blocky
Consistence: Slightly hard, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Depth: 18 to 60 inches
Texture: Stratified extremely gravelly loamy sand to very gravelly sandy loam
Structure: Massive
Consistence: Soft, very friable
Reaction: Mildly alkaline
Salinity: Less than 2 mmhos per cm
Sodicity: SAR less than 2

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: Rare
Permeability: Moderately rapid
Available water capacity: 3.0 to 4.0 inches
Water-supplying capacity: 7 to 9 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.10; T value—5; wind erodibility group—5
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—low
Potential for frost action: Moderate

Characteristics of the Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 2 to 8 percent
Elevation: 4,100 to 4,400 feet
Dominant present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: Less than 4 mmhos per cm
Sodicity: SAR less than 13

Depth: 8 to 60 inches
Texture: Stratified loamy fine sand to silt loam
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline
Salinity: 4 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Medium
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Characteristics of the Moderately Saline Mazuma Soil

Classification: Typic Torriorthents, coarse-loamy, mixed (calcareous), mesic

Position on landscape: Fan skirts and the lower lake plain terraces
Parent material: Loamy lacustrine material
Slope range: 0 to 4 percent
Elevation: 4,100 to 4,400 feet
Dominant present vegetation: Shadscale, black greasewood, bud sagebrush

Climatic Data

Average annual precipitation: About 7 inches
Average annual air temperature: About 51 degrees F
Frost-free period: About 120 days

Typical Profile

Depth: 0 to 8 inches
Texture: Fine sandy loam
Structure: Platy
Consistence: Soft, very friable
Reaction: Strongly alkaline
Salinity: 8 to 16 mmhos per cm
Sodicity: SAR 13 to 23

Depth: 8 to 30 inches
Texture: Sandy loam, fine sandy loam
Structure: Subangular blocky or massive
Consistence: Slightly hard, very friable
Reaction: Strongly alkaline or very strongly alkaline
Salinity: More than 8 mmhos per cm
Sodicity: SAR 13 to 36

Depth: 30 to 60 inches
Texture: Stratified silt loam to sand
Structure: Platy, single grained, or massive
Consistence: Slightly hard, very friable
Reaction: Moderately alkaline to very strongly alkaline
Salinity: More than 2 mmhos per cm
Sodicity: SAR 13 to 36

Soil and Water Features

Depth to a seasonal high water table: More than 60 inches
Frequency of flooding: None
Permeability: Moderately rapid
Available water capacity: 6.2 to 8.4 inches
Water-supplying capacity: 5 to 7 inches
Runoff: Slow
Hydrologic group: B
Erosion factors (surface layer): K value—.28; T value—5; wind erodibility group—3
Hazard of erosion: By water—slight; by wind—slight
Shrink-swell potential: Low
Corrosivity: Steel—high; concrete—high
Potential for frost action: Low

Contrasting Inclusions

Inclusion 1
Classification: Typic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: The middle alluvial fans
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Inclusion 2
Classification: Typic Torriorthents, coarse-silty, mixed (calcareous), mesic
Position on landscape: Lake plain terraces
Distinctive present vegetation: Winterfat, bud sagebrush, bottlebrush squirreltail

Inclusion 3
Classification: Typic Torripsamments, mixed, mesic
Position on landscape: Sand sheets superimposed on lake plain terraces and alluvial fans
Distinctive present vegetation: Littleleaf horsebrush, Nevada dalea, fourwing saltbush, Indian ricegrass

Inclusion 4
Classification: Lithic Torriorthents, loamy-skeletal, mixed (calcareous), mesic
Position on landscape: Rock pediments adjacent to rock outcrops on alluvial fans and lake plain terraces
Distinctive present vegetation: Shadscale, bud sagebrush, bottlebrush squirreltail

Interpretive Groups

Capability classification: Veta soil—IVs, Mazuma soil—IIIe, irrigated; Veta soil and the moderately saline Mazuma soil—VIIs, and the other Mazuma soil—VIIc, nonirrigated
Range site: Veta soil—023XY038NV; Mazuma soil—024XY002NV; the moderately saline Mazuma soil—024XY003NV; Inclusion 1—024XY002NV; Inclusion 2—024XY004NV; Inclusion 3—027XY009NV; Inclusion 4—024XY002NV

Prime Farmland

In this section, prime farmland is defined and the soils in the survey area that are considered prime farmland are listed.

Prime farmland is of major importance in meeting the Nation's short- and long-range needs for food and fiber. The acreage of high-quality farmland is limited, and the U.S. Department of Agriculture recognizes that government at local, State, and Federal levels, as well as individuals, must encourage and facilitate the wise use of our Nation's prime farmland.

Prime farmland soils, as defined by the U.S. Department of Agriculture, are soils that are best suited to food, seed, forage, fiber, and oilseed crops. Such soils have properties that favor the economic production

of sustained high yields of crops. The soils need only to be treated and managed by acceptable farming methods. An adequate moisture supply and a sufficiently long growing season are required. Prime farmland soils produce the highest yields with minimal expenditure of energy and economic resources, and farming these soils results in the least damage to the environment.

Prime farmland soils either are used for food or fiber or are available for these uses. Urban or built-up land and water areas cannot be considered prime farmland.

Prime farmland soils commonly receive an adequate and dependable supply of moisture from precipitation or irrigation. The temperature and length of growing season are favorable, and the level of acidity or alkalinity is acceptable. The soils have few, if any, rocks and are permeable to water and air. They are not excessively erodible or saturated with water for long periods and are not frequently flooded during the growing season. The slope is mainly 0 to 6 percent.

Soils that have a high water table, are subject to flooding, or are droughty may qualify as prime farmland soils where these limitations are overcome by drainage systems, flood control, or irrigation. Onsite evaluation is necessary to determine the effectiveness of corrective measures. More information about the criteria for prime farmland can be obtained at the local office of the Natural Resources Conservation Service.

A recent trend in land use has been the conversion of prime farmland to urban and industrial uses. The loss of prime farmland to other uses puts pressure on lands that are less productive than prime farmland.

The following map units meet the soil requirements for prime farmland when irrigated. On some soils included in the list, measures that overcome a hazard or limitation, such as flooding, wetness, and droughtiness, are needed. The location of each map unit is shown on the detailed soil maps at the back of this publication. The soil qualities that affect use and management are described in the section "Detailed Soil Map Units." This list does not constitute a recommendation for a particular land use.

616 Haybourne sandy loam, 2 to 8 percent slopes
910 Shawave-Deadyon association
1270 Deadyon sandy loam, 4 to 8 percent slopes
1600 Dithod loam

The following map units have a component that meets the requirements for prime farmland when irrigated. The percentage after the name of the map unit indicates the portion of the component in the unit. On some soils included in the list, management practices may have been used to overcome a hazard or limitation, such as salinity, flooding, wetness, or droughtiness.

611 The Haybourne part of Haybourne-Zorravista-Fulstone association—45 percent
615 The Haybourne part of Haybourne-Dun Glen association—55 percent
621 The Haybourne part of Leviathan-Springmeyer-Haybourne association—15 percent
1601 The Dithod part of Dithod-Fluvaquents association—65 percent

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