



Natural
Resources
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Arizona

Basin Outlook Report

January 1, 2007



ARIZONA Water Supply Outlook Report as of January 1, 2007

A full range of Snow Survey and Water Supply Forecasting products is available on the Arizona NRCS Home Page:

Cooperative Snow Survey Program

<http://www.az.nrcs.usda.gov/snow/index.html>

Helpful Internet Sites

Defending Against Drought – NRCS

<http://www.nrcs.usda.gov/feature/highlights/drought.html>

- Ideas on water, land, and crop management for you to consider while creating your drought plan.

Arizona Agri-Weekly

http://www.nass.usda.gov/Statistics_by_State/Arizona/Publications/Crop_Progress_&_Condition/cur-agwk.pdf

- Provides an overview of Arizona’s crop, livestock, range and pasture conditions as reported by local staffs of the USDA’s Agricultural Statistic Service and University of Arizona, College of Agriculture.

SUMMARY

Abnormally dry winter conditions have developed this season. Monitoring stations show precipitation totals for November and December were less than 50 percent of average, while cumulative precipitation since October 1 ranges from 48 percent to 63 percent of average in key river basins. As a result of dry conditions this winter, water users can expect reduced surface water supplies this spring unless current weather patterns shift. Fortunately in-state reservoir storage figures show a fair amount of carryover volume from 2006 to the new year, yet heavy snowfall is needed for the remainder of the winter to replenish the reservoirs.

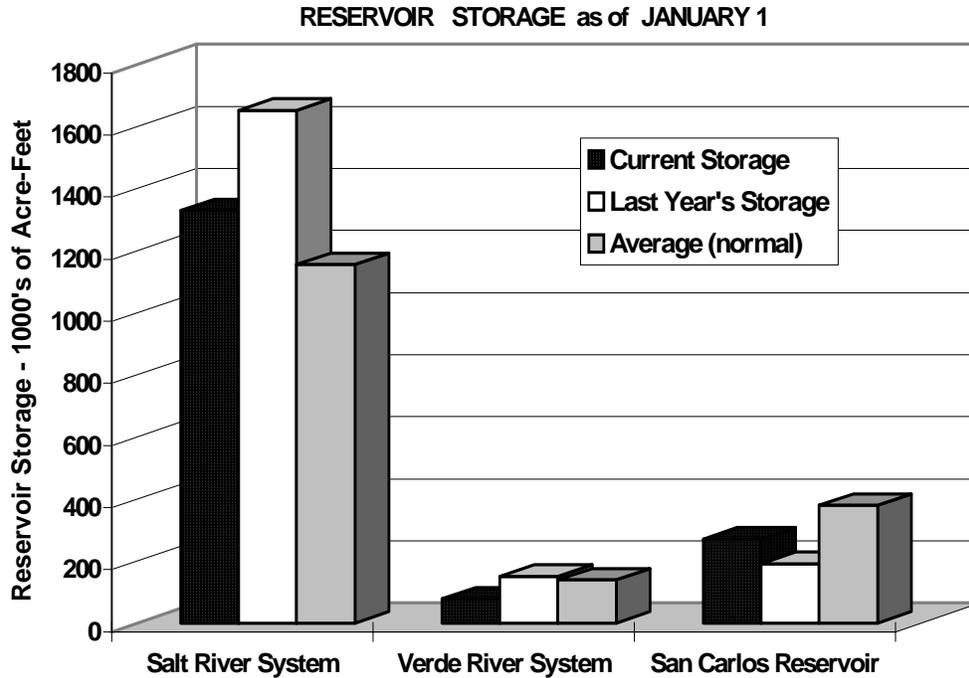
SNOWPACK

Watershed	Percent (%) of 30-Yr. Average Snowpack Levels as of January 1
Salt River Basin	38%
Verde River Basin	40%
Little Colorado River Basin	41%
San Francisco-Upper Gila River Basin	40%
Other Points of Interest	
Chuska Mountains	41%
Central Mogollon Rim	52%
Grand Canyon	33%
San Francisco Peaks	32%
Statewide Snowpack	38%

PRECIPITATION

Mountain data from NRCS SNOTEL sites show that cumulative precipitation since October 1 is below average at all locations. Please refer to the precipitation bar graphs found in this report for more information regarding precipitation levels in the basins.

RESERVOIR

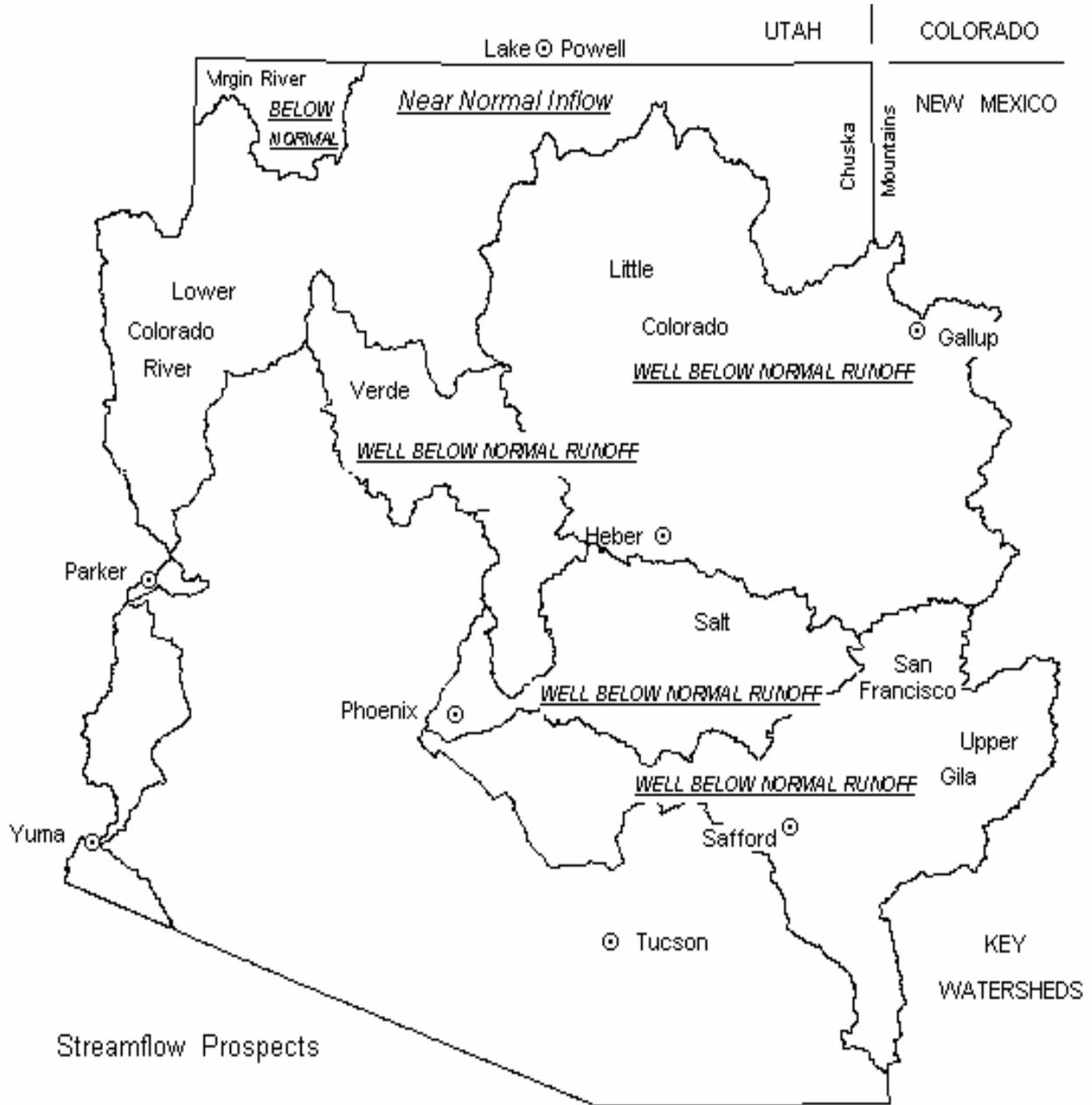


Key storage volumes displayed in thousands of acre-feet (1000 x):

RESERVOIR	CURRENT STORAGE	LAST YEAR STORAGE	30-YEAR AVERAGE
Lyman Lake	7.3	7.9	14.1
Show Low Lake	---	5.1	3.1
Lake Pleasant	634.9	617.1	----
Lake Havasu	584.5	579.4	556.4
Lake Mohave	1579.1	1634.0	1596.6
Lake Powell	12076.0	11576.0	18933.0
Lake Mead	14164.0	15131.0	21775.0
Salt River System	1329.2	1652.6	1155.4
Verde River System	77.8	150.9	139.5
San Carlos Reservoir	270.3	191.5	379.1

STREAMFLOW

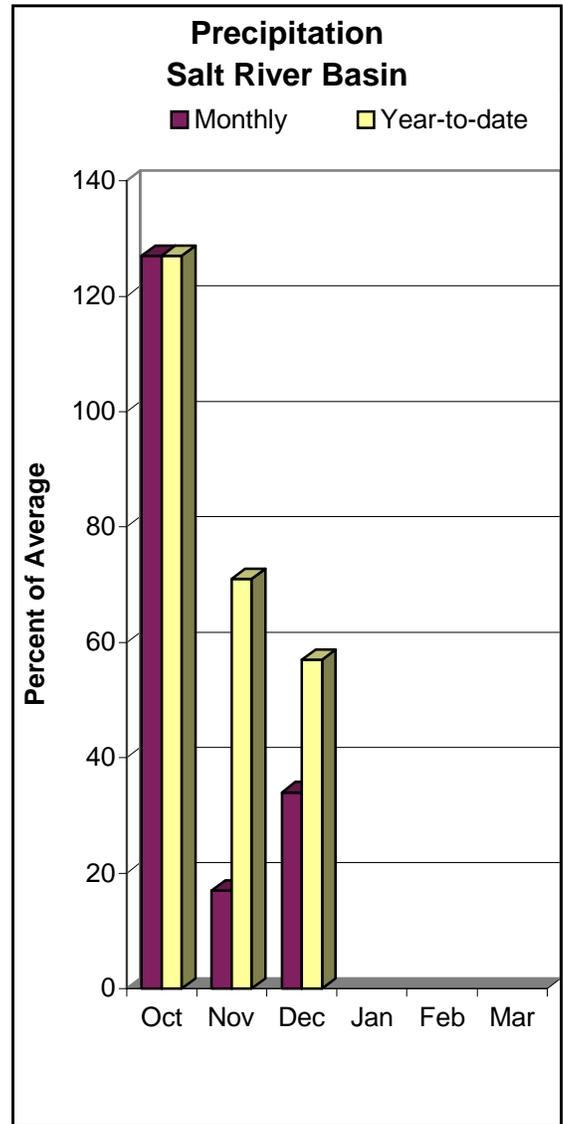
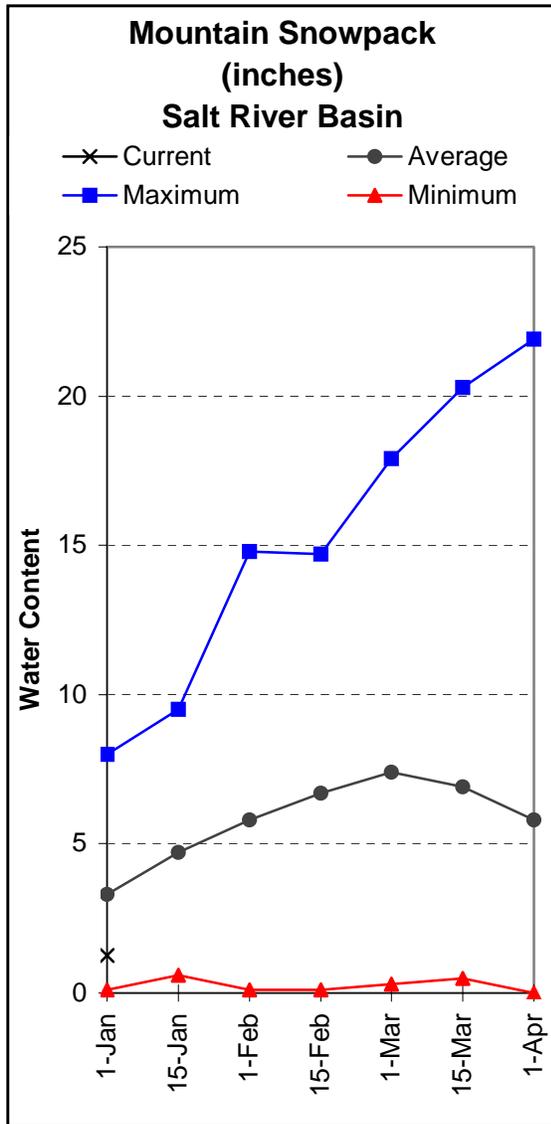
The long-range forecast calls for well below median streamflow levels this season as the result of dry conditions in Arizona's mountain watersheds. Please refer to the basin forecast tables found in this report for more information regarding water supply forecasts.



SALT RIVER BASIN as of January 1, 2007

Well below median stream flow levels are forecast for the basin. In the Salt River, near Roosevelt, the forecast calls for 58 % of median streamflow levels through May, while at Tonto Creek, the forecast calls for 63 % of median streamflow levels through May.

Additionally, snow survey measurements show the Salt snowpack to be 38 % of average, while combined reservoir storage in the Salt River system was reported at 1,329,238 acre-feet.



SALT RIVER BASIN
Streamflow Forecasts - January 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Med (1000AF)
	Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% MED.)	30% (1000AF)	10% (1000AF)		
Salt River nr Roosevelt							
JAN-MAY	78	153	225	58	316	490	385
JANUARY	9.8	11.0	12.0	49	21	43	25
Tonto Creek ab Gun Creek nr Roosevelt							
JAN-MAY	4.8	18.2	35	63	60	115	56
JANUARY	0.71	0.77	1.00	17	4.49	14.21	5.90

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

The average and median are computed for the 1971-2000 base period.

- (1) - The values listed under the 10% and 90% Chance of Exceeding are actually 5% and 95% exceedance levels.
- (2) - The value is natural volume - actual volume may be affected by upstream water management.

SALT RIVER BASIN
Reservoir Storage (1000AF) End of December

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
SALT RIVER RES SYSTEM	2025.8	1329.2	1652.6	1155.4

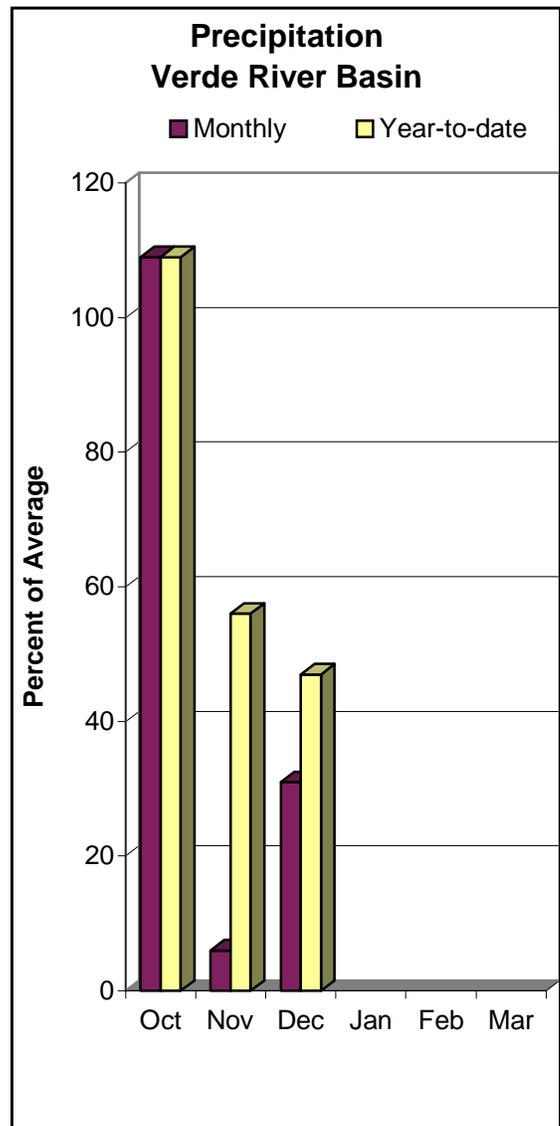
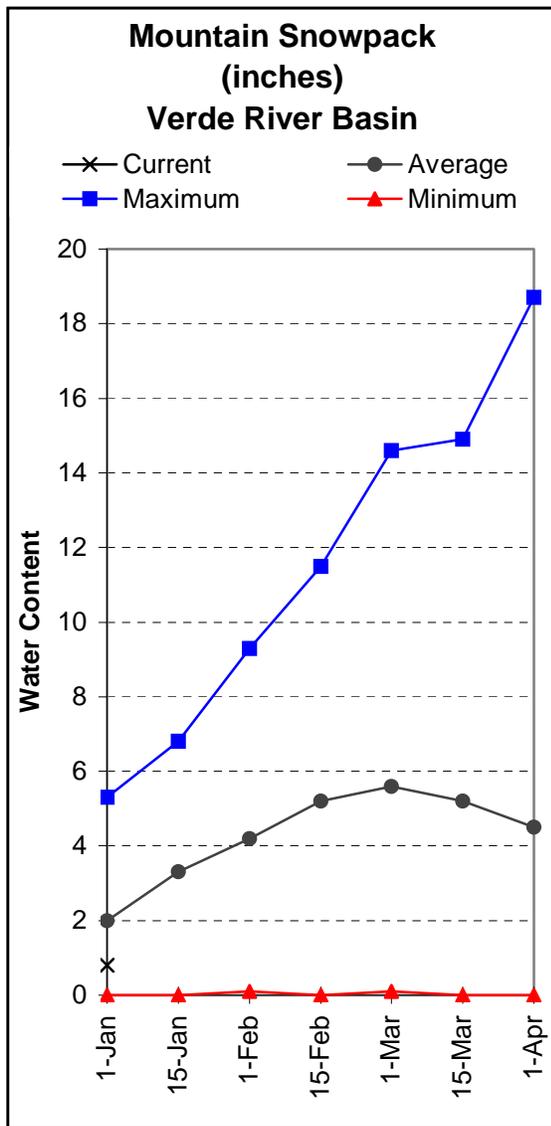
SALT RIVER BASIN
Watershed Snowpack Analysis - January 1, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SALT RIVER BASIN	8	0	38

VERDE RIVER BASIN as of January 1, 2007

Well below median stream flow levels are forecast for the basin. In the Verde River, at Horseshoe Dam, the forecast calls for 80 % of median stream flow levels through May.

Furthermore, snow survey measurements show the Verde snowpack to be 40 % of average on January 1, while combined reservoir storage on the Verde River system stands at 77,814 acre-feet.



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VERDE RIVER BASIN
Streamflow Forecasts - January 1, 2007

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Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Med (1000AF)
	Chance of Exceeding * 90% 70% 50% 30% 10% (1000AF) (1000AF) (1000AF) (% MED.) (1000AF) (1000AF)						
Verde River abv Horseshoe Dam							
JAN-MAY	58	117	175	80	249	392	220
JANUARY	14.4	19.2	25	104	39	67	24

* 90%, 70%, 50%, 30%, and 10% chances of exceeding are the probabilities that the actual volume will exceed the volumes in the table.

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VERDE RIVER BASIN
Reservoir Storage (1000AF) End of December

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Reservoir	Usable Capacity	***** This Year	***** Usable Storage Last Year	***** Average
VERDE RIVER RES SYSTEM	287.4	77.8	150.9	139.5

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VERDE RIVER BASIN
Watershed Snowpack Analysis - January 1, 2007

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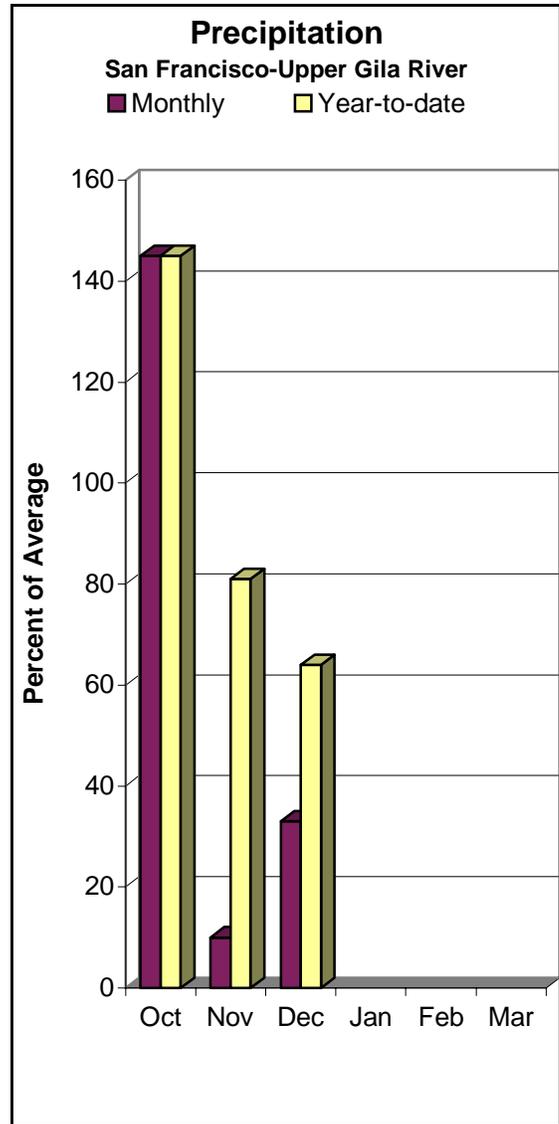
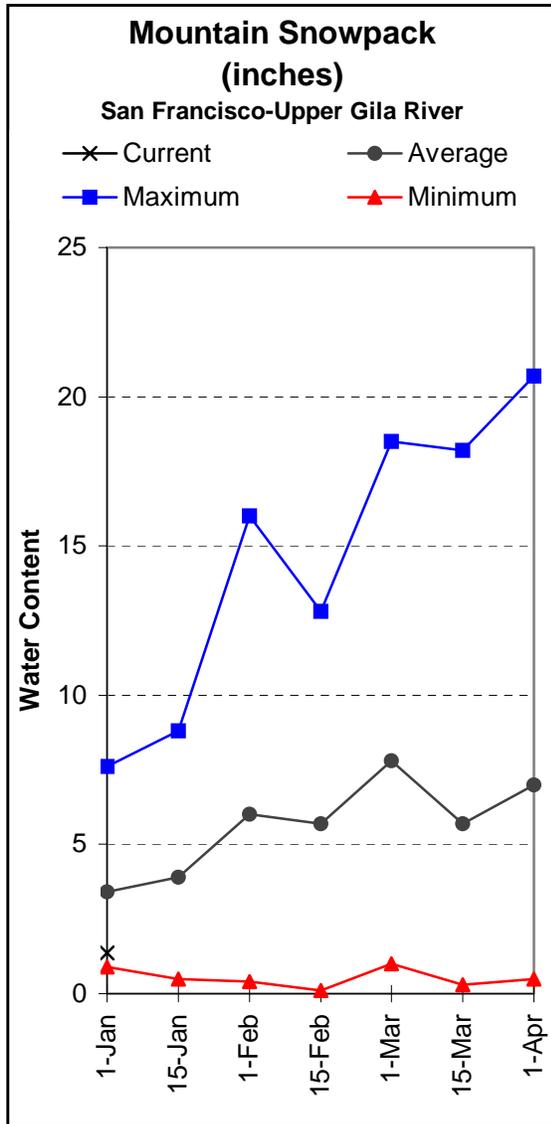
Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
VERDE RIVER BASIN	10	0	40
SAN FRANCISCO PEAKS	3	200	32

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SAN FRANCISCO-UPPER GILA RIVER BASIN as of January 1, 2007

Well below median stream flow levels are forecast for the basin. In the San Francisco River, at Clifton, the forecast calls for 50 % of median stream flow levels through May, while in the Gila River, near Solomon, the forecast calls for 47 % of median stream flow levels through May. At San Carlos Reservoir, inflow to the lake is forecast at 48 % of median through May.

At San Carlos, reservoir storage stands at 270,300 acre-feet, while measurements show snowpack levels to be at 40 % of the 30-year average.



SAN FRANCISCO - UPPER GILA RIVER BASIN
Streamflow Forecasts - January 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Med (1000AF)
	Chance of Exceeding * 90% 70% 50% 30% 10%						
	(1000AF)	(1000AF)	(1000AF)	(% MED.)	(1000AF)	(1000AF)	(1000AF)
Gila River at Gila							
JAN-MAY	16.0	26	34	57	60	89	60
Gila River nr Virden							
JAN-MAY	16.6	25	40	48	83	120	83
San Francisco River at Glenwood							
JAN-MAY	6.9	10.5	13.6	50	27	40	27
San Francisco River at Clifton							
JAN-MAY	14.0	25	35	50	60	102	70
Gila River nr Solomon							
JAN-MAY	33	50	77	47	137	225	165
JANUARY			14.0	71			19.7
San Carlos Reservoir inflow							
JAN-MAY	14.4	29	46	48	88	134	96

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SAN FRANCISCO - UPPER GILA RIVER BASIN
Reservoir Storage (1000AF) End of December

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
SAN CARLOS	875.0	270.3	191.5	379.1
PAINTED ROCK DAM		NO REPORT		

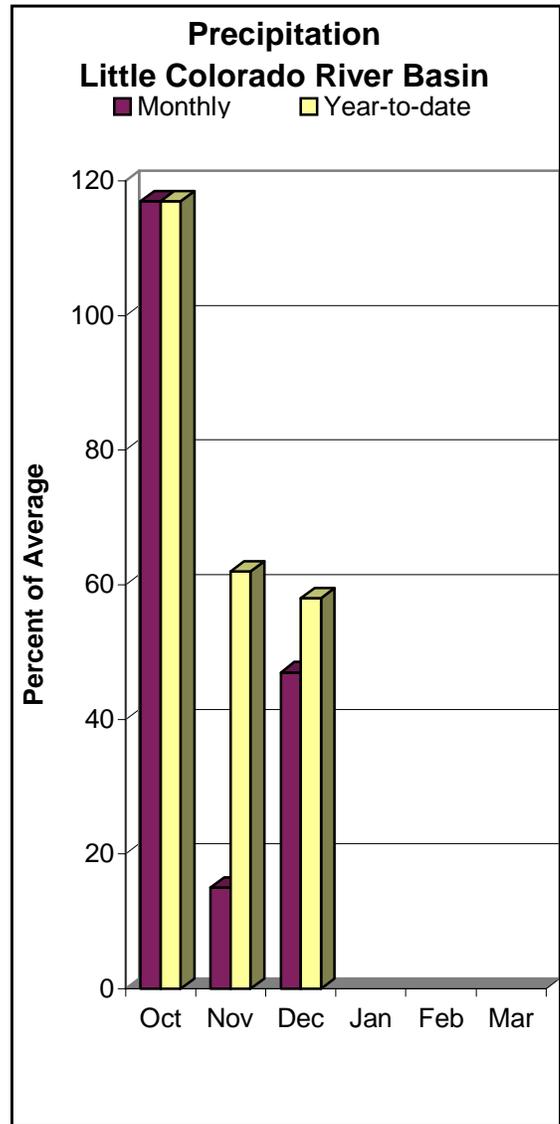
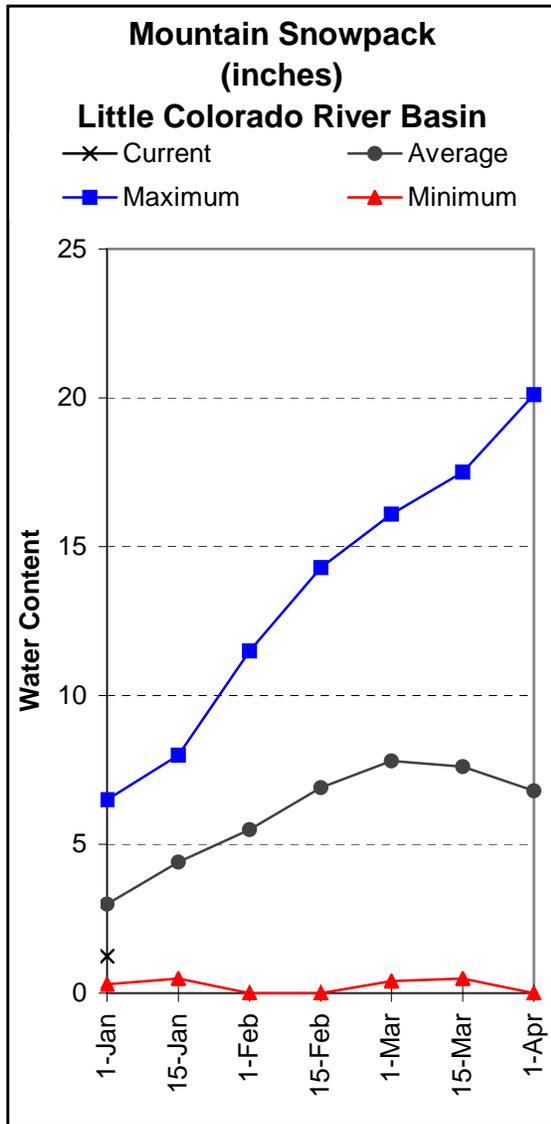
SAN FRANCISCO - UPPER GILA RIVER BASIN
Watershed Snowpack Analysis - January 1, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
SAN FRANCISCO - UPPER GILA R	9	0	40

LITTLE COLORADO RIVER BASIN as of January 1, 2007

Well below median stream flow levels are forecast for the basin. In the Little Colorado River, at Lyman Lake, the forecast calls for 58 % of median stream flow levels through June, while at Woodruff, the forecast calls for 61 % of median stream flow levels through May.

Additionally, snowpacks along the southern headwaters of the Little Colorado River, and along the central Mogollon Rim, were measured at 41 % and 52 % of average, respectively.



LITTLE COLORADO RIVER BASIN
Streamflow Forecasts - January 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Med (1000AF)
	Chance of Exceeding * 90% (1000AF) 70% (1000AF) 50% (1000AF) (% MED.) 30% (1000AF) 10% (1000AF)						
Little Colorado River abv Lyman Lake							
JAN-JUN	1.01	2.59	4.30	58	6.62	11.39	7.40
Rio Nutria nr Ramah							
JAN-MAY	0.06	0.62	1.79	58	3.30	7.60	3.10
Ramah Reservoir inflow							
JAN-MAY	0.05	0.34	0.97	57	1.80	4.30	1.71
Zuni River abv Black Rock Reservoir							
JAN-MAY	0.07	0.30	0.84	57	1.33	2.20	1.48
Little Colorado River at Woodruff							
JAN-MAY	0.54	1.08	2.20	61	4.40	7.60	3.60
Blue Ridge Reservoir inflow							
JAN-MAY	3.6	7.7	12.0	70	17.1	27	17.1
Lake Mary inflow							
JAN-MAY	0.40	1.50	3.30	66	5.70	11.00	5.00

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LITTLE COLORADO RIVER BASIN
Reservoir Storage (1000AF) End of December

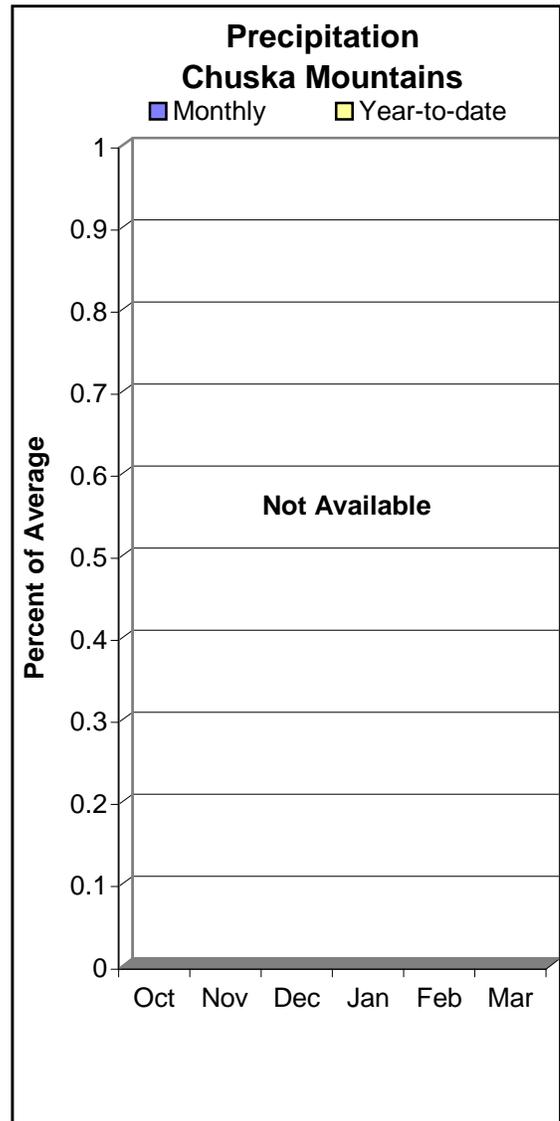
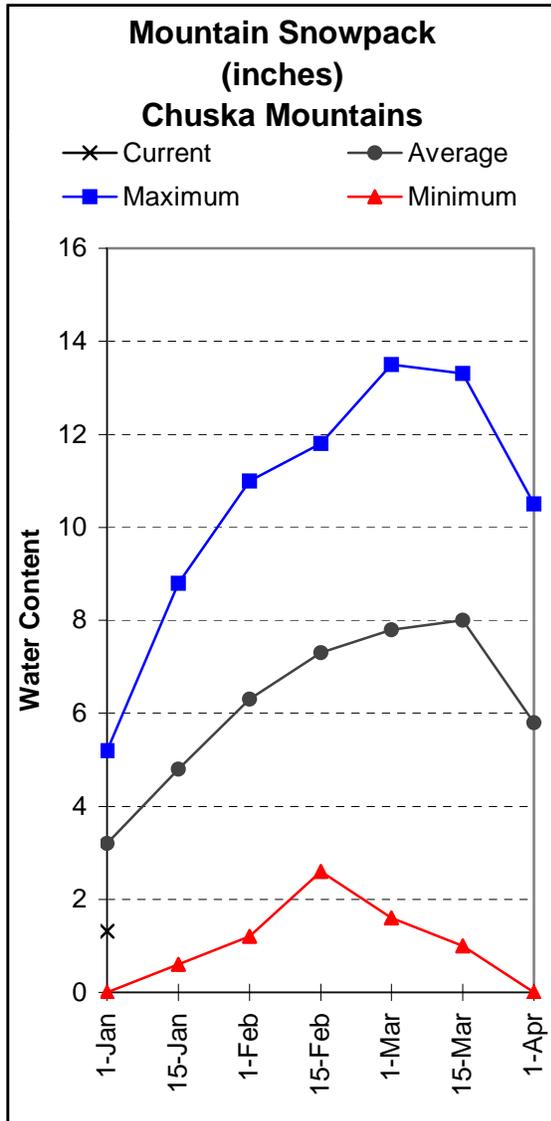
Reservoir	Usable Capacity	***** This Year *****	Usable Storage Last Year	***** Average *****
LYMAN RESERVOIR	30.0	7.3	7.9	14.1

LITTLE COLORADO RIVER BASIN
Watershed Snowpack Analysis - January 1, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
LITTLE COLORADO - SOUTHERN H	9	0	41
CENTRAL MOGOLLON RIM	4	0	52

CHUSKA MOUNTAINS as of January 1, 2007

Snow survey measurements conducted by staff of the Navajo Water Management Branch show the Chuska snowpack to be 41 % of average, while well below average runoff is forecast for Captain Tom Wash, Wheatfields Creek, Bowl Canyon Creek, and Kinlichee Creek.



CHUSKA MOUNTAINS
Streamflow Forecasts - January 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>					30 Yr Avg (1000AF)	
	Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
=====							
Captain Tom Wash Nr Two Gray Hills							
MAR-MAY	0.03	0.16	0.60	21	1.51	4.08	2.83
Wheatfields Creek Nr Wheatfields							
MAR-MAY	0.15	0.43	0.75	26	1.19	2.11	2.90
Bowl Canyon Creek Abv Asaayi Lake							
MAR-MAY	0.13	0.29	0.45	45	0.67	1.10	1.00
Kinlichee Creek							
MAR-MAY	0.05	0.11	0.30	18	0.65	1.53	1.70

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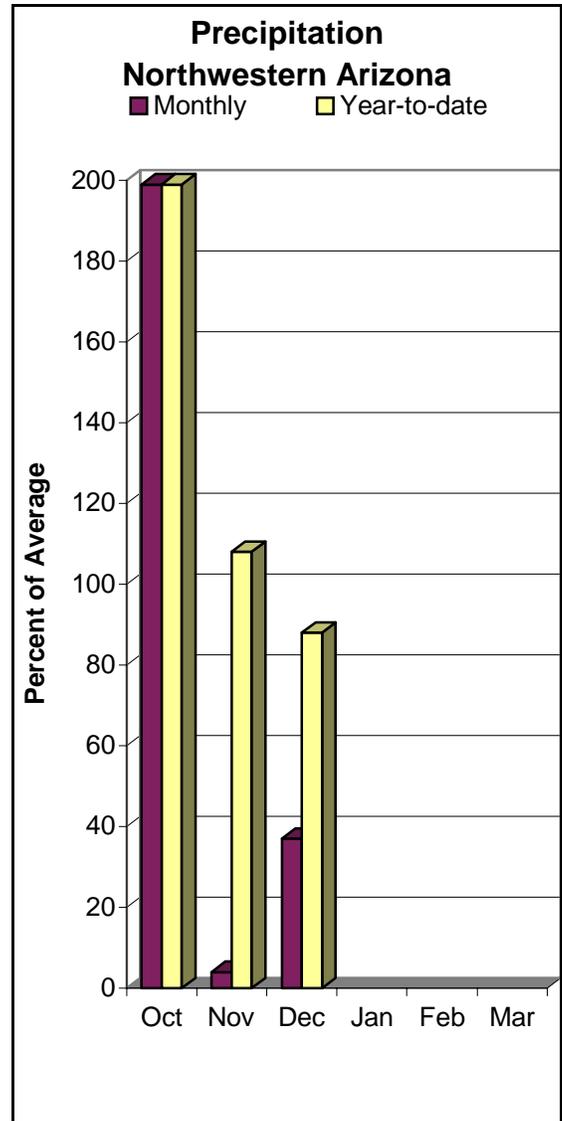
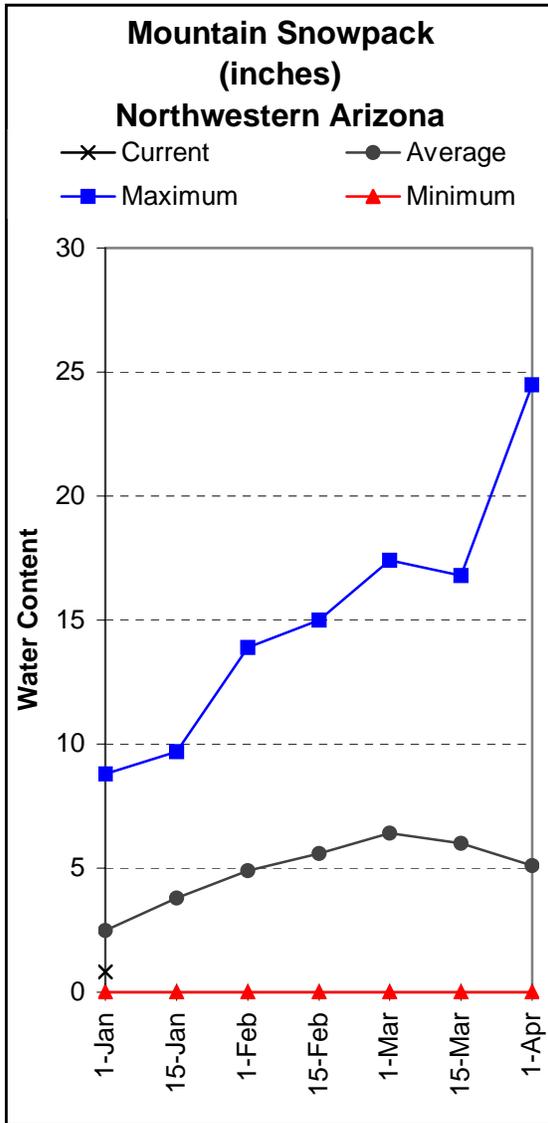
CHUSKA MOUNTAINS
Watershed Snowpack Analysis - January 1, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
CHUSKA MOUNTAINS	7	1271	41
DEFIANCE PLATEAU	2	0	31

NORTHWESTERN ARIZONA as of January 1, 2007

On the Colorado River, inflow to Lake Powell is forecast at 91 % of the 30-year average for the forecast period April-July, while at Littlefield, the Virgin River is forecast at 70 % average.

At the Grand Canyon, measurements conducted by park rangers show the snowpack to be at 33 % of average.



NORTHWESTERN ARIZONA
Streamflow Forecasts - January 1, 2007

Forecast Pt Forecast Period	<=== Drier === Future Conditions === Wetter ===>						30 Yr Avg (1000AF)
	Chance of Exceeding *						
	90% (1000AF)	70% (1000AF)	50% (1000AF) (% AVG.)	30% (1000AF)	10% (1000AF)		
Virgin River at Littlefield							
APR-JUL	8.5	30	52	70	80	132	74
Lake Powell Inflow (2)							
APR-JUL	3600	5740	7200	91	8660	10800	7930

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NORTHWESTERN ARIZONA
Reservoir Storage (1000AF) End of December

Reservoir	Usable Capacity	***** This Year	Usable Storage Last Year	***** Average
LAKE HAVASU	619.0	584.5	579.4	556.4
LAKE MOHAVE	1810.0	1579.1	1634.2	1596.6
LAKE MEAD	26159.0	14164.0	15131.0	21775.0
LAKE POWELL	24322.0	12076.0	11576.0	18933.0

NORTHWESTERN ARIZONA
Watershed Snowpack Analysis - January 1, 2007

Watershed	Number of Data Sites	This Year as Percent of Last Year	Average
GRAND CANYON	2	0	33

S N O W S U R V E Y D A T A

JANUARY 1, 2007

SNOW COURSE	ELEV.	DATE	SNOW DEPTH	WATER CONTENT	LAST YEAR	AVERAGE 71-00
ARBABS FOREST (AK)	7680	12/28	3	.4	.0	1.2
BAKER BUTTE SNOTEL	7330	1/01	8	1.6	.0	2.3
BAKER BUTTE #2	7700	12/28	8	1.0	.0	4.2
BALDY SNOTEL	9220	1/01	3	1.0	.0	3.5
BEAVER HEAD	8000	12/29	2	0.2	.0	1.6
BEAVER HEAD SNOTEL	7990	1/01	4	1.9	.0	1.9
BEAVER SPRING	9220	12/28	7	1.4	.3	3.9
BRIGHT ANGEL	8400	12/30	8	1.6	.0	3.9
BUCK SPRING	7400	12/26	0	0.0	.0	2.7
CHALENDER	7100	12/27	1	0.1	.0	1.3
CHEESE SPRINGS	8600	12/27	6	1.2	.0	2.5
CORONADO TRL SNOTEL	8400	1/01	1	.1	.0	1.8
CORONADO TRAIL	8350	12/29	0	0.0	.0	1.6
FLUTED ROCK	7800	12/28	2	.4	.0	1.4
FORT APACHE	9160	12/27	6	1.7	.0	3.8
FORT VALLEY	7350	12/27	0	0.0	.0	1.2
FRY SNOTEL	7220	1/01	6	1.2	.0	2.8
GRAND CANYON	7500	12/27	1	0.2	.0	1.6
HANNAGAN MDWS SNOTEL	9020	1/01	8	1.5	.0	5.5
HAPPY JACK	7630	12/26	2	0.3	.0	2.0
HAPPY JACK SNOTEL	7630	1/01	9	1.6	.0	2.1
HEBER SNOTEL	7640	1/01	8	1.4	.0	2.3
LAKE MARY	6930	12/28	2	0.3	.0	1.5
MAVERICK FORK SNOTEL	9200	1/01	7	1.8	.0	4.2
MORMON MTN SNOTEL	7500	1/01	6	.9	.0	2.4
MORMON MT. SUMMIT #2	8470	12/28	6	1.0	.0	1.1
NEWMAN PARK	6750	12/27	2	0.6	.0	.9
NUTRIOSO	8500	12/29	0	0.0	.0	1.0
PROMONTORY SNOTEL	7900	1/01	14	3.0	.0	4.6
SNOW BOWL #1 ALT.	10260	12/26	2	0.4	.0	5.7
SNOW BOWL #2	11000	12/26	4	0.6	1.0	9.0
SNOWSLIDE CYN SNOTEL	9750	1/01	17	6.0	2.5	7.0
TSAILE CANYON #1	8160	12/27	5	1.1	.0	2.6
TSAILE CANYON #3	8920	12/27	8	1.5	.2	3.6
WHITE HORSE SNOTEL	7180	1/01	2	.6	.0	2.0
WILDCAT SNOTEL	7850	1/01	2	.7	.0	1.7
WILLIAMS SKI RUN	7720	12/27	2	0.2	.0	3.5
WORKMAN CREEK SNOTEL	6900	1/01	6	1.5	.0	2.9

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