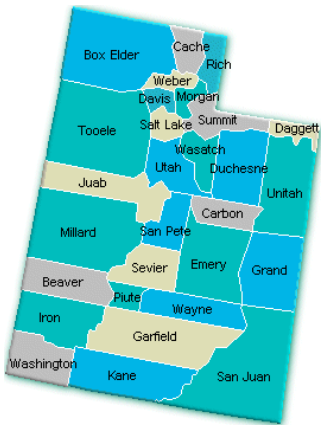
Ground and Surface Water Conservation Ranking Tool Questions and Instructions



USDA-NRCS—Salt Lake City, Utah

2007-Environmental Quality Incentives Program

Note to all users: The official Application and Evaluation Ranking Tools are located in Protracts.

A statewide map and individual county maps necessary to complete the Pro-Tracts ranking tool are available on the state office shared drive using the following path: *Service Center → NRCS → GSWC07*

This information is of a sensitive nature and should be safeguarded. It is important that this information not be posted to a public accessible website and is for official use only. These are the terms under which NRCS obtained the public water supply data from the state. Field offices should print a copy of the state map and each of the counties the office services. It is permissible to use the maps to make appropriate determinations and development of conservation plans with cooperators, however copies of the map should not be filed in the cooperators case file.

References:

- http://www.ut.nrcs.usda.gov/technical/
- EFOTG
- CPM 440—Part 512 CPC
- CPM 440-Part 515 EQIP
- TMDL or Listed Watersheds:
- National Planning Procedures Handbook
- UT Bulletin 300-07-04
- Area Agronomist
- **Questions on the use of the ranking tool should be directed through Area Programs Specialists to Julie Nelson, State Economist.**

National At-Risk species Resource Concerns

- Plant Condition; Threatened and Endangered Plant Species
- Plant Condition; T&E Plant Species: Declining Species, Species of Concern
- Fish and Wildlife; Threatened and Endangered Fish and Wildlife Species
- Fish and Wildlife; T&E Species: Declining Species, Species of Concern

NATIONAL Priority Issues

Question 1: Will the treatment you intend to implement using EQIP result in considerable reductions of non-point source pollution, such as nutrients, sediment, pesticides, excess salinity in impaired watersheds consistent with TMDL's where available as well as the reduction of groundwater contamination or point source such as contamination from confined animal feeding operations?

- To claim these points, the proposed project must be expected to meet quality criteria for all applicable NRCS Water Quality criteria.

Question 2: Will the treatment you intend to implement using EQIP result in the conservation of a considerable amount of ground or surface water resources?

- To claim these points, the proposed project must be expected to meet quality criteria for all applicable NRCS Water Quantity criteria.

Question 3: Will the treatment you intend to implement using EQIP result in a considerable reduction of emissions, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards?

- To claim these points, the proposed project must include one or more of the conservation practices on pages 2 and 3 (left side bar.)

Question 4: Will the treatment you intend to implement using EQIP result in a considerable reduction in soil erosion and sedimentation from unacceptable levels on agricultural land?

- To claim these points, soil erosion must go from above T to below T as a result of the proposed project OR Quality criteria for Soil Condition; Rangeland Site Stability must be met as a result of implementing the proposed project.

Question 5: Will the treatment you intend to implement using EQIP result in a considerable increase in the promotion of at-risk species habitat conservation?

- To claim these points, the project must be expected to meet quality criteria for one or more of the four national at-risk species resource concerns. (see list, left sidebar).

Irrigation Efficiencies Table 1

Uncontrolled Flood	35%
Controlled Flood	50%
Furrow Graded	60%
Surge System	65%
Borders Graded	80%
Big Gun	65%
Hand or Wheel Line	65%
Pivot or Linear	80%
Level Basin	90%
Surface Drip	90%
Subsurface Drip	95%

Ref. UT652.0605 State Supplement And Brent Draper, UT NRCS State Irrigation Engineer

Irrigation Efficiencies Table 2

Use this table to determine efficiencies when "replacing" systems that have exceeded their useful life spans.

When going from....to.....

Wheel Line to Wheel Line
55% to 65 %

Wheel Line to Pivot
55% to 80%

Pivot to Pivot
65% to 80%

per discussions with Clare Prestwich, NRCS National Irrigation Specialist

STATE Priority Issues

Questions 1-18: Answer 'yes' to the one question that applies using total system cost and 2007 cost list prices. Answer 'yes' to only one.

The total system cost shall not include management practices. If an applicant applies for management practices only (no structural measures), select the lowest cost bracket ($0 to $300) as the total system cost. Management practices may be applied without structural practices; however, if an application is ranked for an irrigation system, the associated management practices (IWM, pest management, nutrient management etc.) must be applied to the same field as the irrigation practices.

Example Question 1-18: *Is the total cost per acre between $XX and YY?*

Questions 19-30: Answer 'yes' to the one question that applies using the system definitions and system efficiencies below. Answer 'yes' to only one. Use Irrigation Efficiencies Tables 1 and 2 on left sidebar to evaluate the change in efficiency, as follows: Proposed system efficiency minus Current system efficiency =Change in efficiency.

IMPORTANT: Use Table 2 to determine efficiencies when "replacing" systems that have exceeded their useful lifespans

Example Question 19-30: *Is the Change in irrigation efficiency XYZ%?*

IMPORTANT: Use the Irrigation Efficiencies Table values for before and after efficiencies for ALL rankings.

Question 31: Answer question 31 using the Utah GSWC map available on the SO shared drive.

31. *Proposed project falls within a declining aquifer, as shown on the Utah GSWC map.*

EQIP National Priorities

1. Reductions of **nonpoint source** pollution, such as nutrients, sediment, pesticides, or excess salinity in impaired watersheds consistent with TMDLs where available as well as the reduction of groundwater contamination and reduction of point sources such as contamination from confined animal feeding operations;
2. Conservation of **ground and surface water** resources;
3. Reduction of **emissions**, such as particulate matter, nitrogen oxides (NOx), volatile organic compounds, and ozone precursors and depleters that contribute to air quality impairment violations of National Ambient Air Quality Standards;
4. Reduction in **soil erosion and sedimentation** from unacceptable levels on agricultural land; and
5. Promotion of **at-risk species** habitat conservation.

LOCAL Priority Issues

Question 1: Is the applicant addressing noxious Species as identified by the State or County or Cooperative Weed Management Area. Contact your local weed supervisor or county agent to identify if the target species is of concern. If answered yes, these species must be addressed through the appropriate practices in the contract.

1. *Does the plan address control of an invasive species identified by a state, county, or local government or by a local Cooperative Weed Management Area as being a noxious species?*

Question 2: Is the planned project in an approved area wide plan as defined by the National Planning Procedures Handbook, UT Bulletin 300-7-04 and been designated as such by the Assistant for Field Operations? In order to answer yes to this question all of these REQUIREMENTS MUST BE MET.

2. *Is this project in an area that is covered by an approved areawide plan as defined by the National Planning Procedures Handbook ?*

Question 3: *If this project is implemented, will runoff that previously left the property and entered a waterway be kept on the property*? Answer yes or no.

Question 4: *If this project is implemented, will runoff that previously left the property but did not enter a waterway be kept on the property*? Answer yes or no.

Question 5: *Will Irrigation Water Management be applied for 3 or more years? (3 years maximum cost-share.)* Answer yes or no.

Question 6: *Will Nutrient Management, be applied for 3 or more years? (3 years maximum cost-share.)* Answer yes or no.

Question 7: *Will Pest Management, be applied for 3 or more years? (3 years maximum cost-shareable).* Answer yes or no.

***Question 8**: Will Well Water Testing (355) be applied? (1 year maximum cost-shareable). Answer yes or no.*

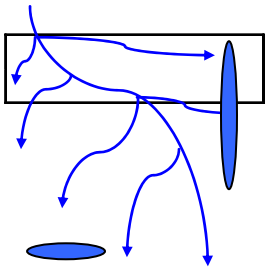
***Questions 9-13**: Indicate Major Soil is Capability Class. Only answer that question that applies.*

***Question 14**: Answer question 14 using the Utah GSWC map available on the SO shared drive.*

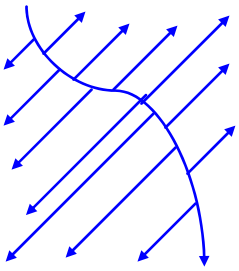
Question: Proposed land treatment lies within 3 miles of a ground water protection or non-community protection zone, as shown on Utah GSWC map.

FLOOD IRRIGATION METHODS

Use your professional judgment to choose the picture/description below that best matches the type of irrigation method in the field.

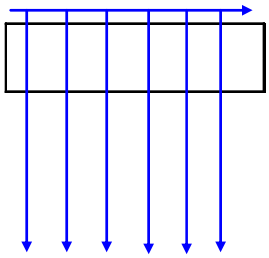


Uncontrolled Flood
Ridge
Irrigation



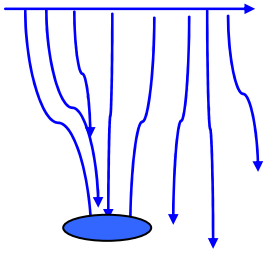
Controlled Flood

Ridge irrigation using concrete ditch, gated pipe, etc.

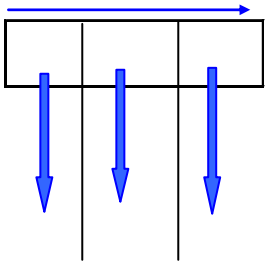


Controlled Flood

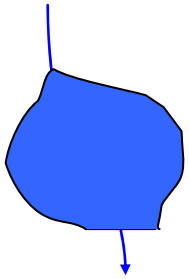
Earth ditch, Gated Pipe, Corrigations, Furrow, etc.
Furrow Graded
< 2% Slope



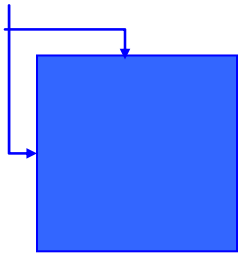
Uncontrolled Flood
Unlevel, no furrow, no Corrigations, etc.



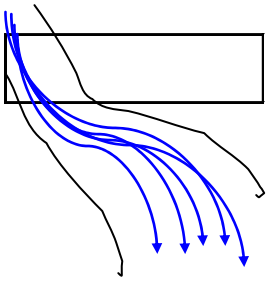
Controlled Flood
Borders, etc.
Border Graded
<= .5% slope



Uncontrolled Flood
Dam and flood



Level Basin
<= .03% slope



Uncontrolled Flood
Turn water out and let it go.

Conservation Practices—to claim points for National Priority Question #3, the proposed project must include one or more of the following practices:

Access Road (560)	Stream Habitat Improvement and Management (395)
Irrigation System, Surface and Subsurface (443)	Deep Tillage (324)
Alley Cropping (311)	Streambank and Shoreline Protection (580)
Irrigation Water Management (449)	Drainage Water Management (554)
Amendments for the Treatment of Agricultural Waste (591)	Stripcropping (585)
Mulching (484)	Feed Management (592)
Anaerobic Digester, Controlled Temperature (366)	Surface Roughening (609)
Nutrient Management (590)	Field Border (386)
Animal Mortality Facility (316)	Tree/Shrub Establishment (612)
Pasture and Hay Planting (512)	Filter Strip (393)
Anionic Polyacrylamide (PAM) Erosion Control (450)	Upland Wildlife Habitat Management (645)
Pest Management (595)	Firebreak (394)
Atmospheric Resource Quality Management (370)	Use Exclusion (472)
Prescribed Burning (338)	Forest Site Preparation (490)
Closure of Waste Impoundment (360)	Vegetative Barrier (601)
Prescribed Grazing (528)	Forest Stand Improvement (666)
Composting Facility (317)	Waste Facility Cover (367)
Pumping Plant (533)	Fuel Break (383)
Conservation Cover (327)	Waste Storage Facility (313)
Range Planting (550)	Grassed Waterway (412)
Conservation Crop Rotation (328)	Waste Treatment Lagoon (359)
Recreation Area Improvement (562)	Grazing Land Mechanical Treatment (548)
Constructed Wetland (656)	Waste Utilization (633)
Recreation Land Grading and Shaping (566)	Heavy Use Area Protection (561)
Contour Buffer Strips (332)	Wastewater Treatment Strip (635)
Recreation Trail and Walkway (568)	Hedgerow Planting (422)
Contour Farming (330)	Wetland Creation (658)
Residue Management, Seasonal (344)	Herbaceous Wind Barriers (603)
Contour Orchard and Other Fruit Area (331)	Wetland Enhancement (659)
Restoration and Management of Declining Habitats (643)	Irrigation Canal or Lateral (320)
Cover Crop (340)	Wetland Restoration (657)
Riparian Forest Buffer (391)	Irrigation Field Ditch (388)
Critical Area Planting (342)	Wetland Wildlife Habitat Management (644)
Riparian Herbaceous Cover (390)	Irrigation System, Microirrigation (441)
Cross Wind Ridges (589A)	Windbreak/Shelterbelt Establishment (380)
Rock Barrier (555)	Irrigation System, Sprinkler (442)
Cross Wind Trap Strips (589C)	Windbreak/Shelterbelt Renovation (650)