

Watershed Improvement—Crop/Hayland Ranking Questions and Instructions



USDA-NRCS—Salt Lake City, Utah



2007-Environmental Quality
Incentives Program

Note to all users: The **official** Ranking Tools are located in Protracts.

Screening Criteria

Participant Name: _____ Protracts ID # _____

NRCS Employee Screening Application: _____ Date: _____

References:

- ◆ [STIR, RUSLE II, SCI](#)
- ◆ [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 Specialists](#)
- ◆ **Questions on the use of the ranking tool should be directed through Area Program Specialists to Julie Nelson, State Economist.**

A. Is the proposed treatment a “delivery-system” only proposal?

Yes _____ No _____ **If yes, LOW Priority.**

B. If the project involves irrigation, is the change in irrigation efficiency less than 20%?

Yes _____ No _____ N/A _____ **If yes, MEDIUM Priority.**

C. Is the project for a pivot sprinkler on less than 21 acres?

Yes _____ No _____ N/A _____ **If yes, MEDIUM Priority.**

D. Is project is less than a 1/2 pivot?

Yes _____ No _____ **If yes, MEDIUM Priority.**

E. Have all existing and previous EQIP/WHIP/AMA contracts been kept on schedule with all contract items being satisfactorily completed?

Yes _____ No _____ N/A _____ **If no, LOW Priority**

F. If none of the above apply, the application receives a **HIGH** priority.

G. The individual priority for this application is:

_____ High _____ Medium _____ Low

Applicant Signature: _____

QR Date: _____ Initials: _____



HIGH PRIORITY applications: will be entered into the Protracts AERT.

- Applications screened as “high” will receive higher priority than MEDIUM or LOW priorities receiving more AERT points.

MEDIUM PRIORITY applications: will be entered into the Protracts AERT.

- Applications screened as “medium” will receive lower priority than HIGH priorities receiving fewer AERT points. After Peer Reviews, Medium priority rankings will be provided to the Area Program Specialist for use in project selection.

LOW PRIORITY applications: will be entered into the Protracts AERT.

- Applications screened as “low” will receive lower priority that HIGH or MEDIUM priorities receiving fewer AERT points. After Peer Reviews, Low priority rankings will be provided to the Area Program Specialist for use in project selection.

Notes:

NATIONAL Priority Issues

In order to answer yes to the National issues/priority questions you must have adequate documentation that the practice(s) will conserve the priority issue. This documentation can be in the form of a list of Threatened and Endangered species that will be impacted by the practices on the UT-CPA-52 or in the Tech Notes. See the species of concern list. Talk with your Area or partner biologist for more information on these species.

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 page 3 & 4.

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: ***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.**

At-risk **plant** species are in Appendix C. - Rare Plant Species by Habitat Type

At-risk **animal** species are in Appendix A. - Utah CWCS Tier I, II, and III Species List.

These may be found on the Utah-NRCS Website (Programs-EQIP-Wildlife).

EQIP National Priorities

1. Reduction 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.

Access Road (560)
Irrigation System, Surface and Subsurface (443)
Alley Cropping (311)
Irrigation Water Management (449)
Amendments for the Treatment of Agricultural Waste (591)
Mulching (484)
Anaerobic Digester, Controlled Temperature (366)
Nutrient Management (590)
Animal Mortality Facility (316)
Pasture and Hay Planting (512)
Anionic Polyacrylamide (PAM)
Erosion Control (450)
Pest Management (595)
Atmospheric Resource Quality Management (370)
Prescribed Burning (338)
Closure of Waste Impoundment (360)
Prescribed Grazing (528)
Composting Facility (317)
Pumping Plant (533)
Conservation Cover (327)
Range Planting (550)
Conservation Crop Rotation (328)
Recreation Area Improvement (562)
Constructed Wetland (656)
Recreation Land Grading and Shaping (566)
Contour Buffer Strips (332)
Recreation Trail and Walkway (568)
Contour Farming (330)
Residue Management, Seasonal (344)
Contour Orchard and Other Fruit Area (331)
Restoration and Management of Declining Habitats (643)
Cover Crop (340)
Riparian Forest Buffer (391)
Critical Area Planting (342)
Riparian Herbaceous Cover (390)
Cross Wind Ridges (589A)
Rock Barrier (555)
Cross Wind Trap Strips (589C)

STATE Priority Issues

Questions 1-3: What type of plan does the producer have? An RMS level plan where all resource concerns are addressed, a progressive plan where only one or two resource concerns are addressed or is it only in the inventory (identified the land uses, fields, tract soils etc. and the producer has not made any decisions) phase of the planning process. Answer yes to only one. Reference—NPPH.

1. *Is the type of plan the cooperator has on the Hayland/Cropland CTU for the EQIP project an RMS plan?*
2. *Is the type of plan the cooperator has on the Hayland/Cropland CTU for the EQIP project a Progressive plan?*
3. *Is the type of plan the cooperator has on the Hayland/Cropland CTU for the EQIP project an Inventory?*

Questions 4-7: Do practices in the application have an impact on soil condition index? You will need to run RUSLEII and the Soil Tillage impact rating tool to determine this. Contact Area Agronomist for assistance. Answer yes to only one.

4. *Is the projected reduction in STIR is more than or equal to 40?*
5. *Is the projected reduction in STIR is less than 40 and greater than or equal to 25?*
6. *Is the projected reduction in STIR is less than 25 and greater than or equal to 10?*
7. *Is the projected reduction in STIR is less than 10 and greater than or equal to 5?*

Questions 8-10: All of the management practices identified MUST take place on the identified tract and field of the application and are scheduled and implemented within the contract period. An example would be residue management is planned for 3 years in the alfalfa rotation - does the small grain part of the rotation fall within the contract period. If it does not then it can not be contracted. Refer to Practice Standard and Area Agronomist. Answer yes to only one.

8. *Will a management incentive practice be applied to 100% of the acres directly benefited by the structural practices, and will the management practice be applied for only 1 year? (If there is no change in SCI then answer No.)*
9. *Will a management incentive practice be applied to 100% of the acres directly benefited by the structural practices, and will the management practice be applied for only 2 years? (If there is no change in SCI then answer No.)*
10. *Will a management incentive practice be applied to 100% of the acres directly benefited by the structural practices, and will the management practice be applied for 3 years? (If there is no change in SCI then answer No.)*

Question 11: Is the applicant in compliance with ALL HEL and wetland provisions of the 1985 farm bill as amended? (A producer CAN NOT (see appendix 1 paragraph E) get a payment on a practice that IS required for compliance for HEL compliance plans. For example, if a producer is required to apply residue management to be in compliance with the Farm bill rules, policy, and statute requirements he can not receive or contract residue management payments on the field that requires that practice for compliance). Answer yes or no.

11. *Will a conservation practice that will solve an erosion problem be applied to land designated as Highly Erodible Land (HEL)?*

STATE Priority Issues, continued

Stream Habitat Improvement and Management (395)
 Deep Tillage (324)
 Streambank and Shoreline Protection (580)
 Drainage Water Management (554)
 Stripcropping (585)
 Feed Management (592)
 Surface Roughening (609)
 Field Border (386)
 Tree/Shrub Establishment (612)
 Filter Strip (393)
 Upland Wildlife Habitat Management (645)
 Firebreak (394)
 Use Exclusion (472)
 Forest Site Preparation (490)
 Vegetative Barrier (601)
 Forest Stand Improvement (666)
 Waste Facility Cover (367)
 Fuel Break (383)
 Waste Storage Facility (313)
 Grassed Waterway (412)
 Waste Treatment Lagoon (359)
 Grazing Land Mechanical Treatment (548)
 Waste Utilization (633)
 Heavy Use Area Protection (561)
 Wastewater Treatment Strip (635)
 Hedgerow Planting (422)
 Wetland Creation (658)
 Herbaceous Wind Barriers (603)
 Wetland Enhancement (659)
 Irrigation Canal or Lateral (320)
 Wetland Restoration (657)
 Irrigation Field Ditch (388)
 Wetland Wildlife Habitat Management (644)
 Irrigation System, Microirrigation (441)
 Windbreak/Shelterbelt Establishment (380)
 Irrigation System, Sprinkler (442)

Question 12: 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.**

12. 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 13: 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.**

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

LOCAL Priority Issues

Question 1: Has the applicant had a soils test done by an approved soils testing lab in the last five years on perennial crops and every year on annually tilled crops to include small grains and other annual crops? Participant must supply documentation.

1. Do you have a current soil test on all land this application is servicing (current year test on annual crop or within five years on perennial crops 2002 - 2006)?

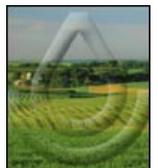
Questions 2-14: Is there a change in the Soil condition index score from the baseline score as indicated by RUSLE II (if wind erosion is a concern then you must run the Wind erosion Equation and insert into RUSLE II.) This will help you document the cropping sequence also.

- Sample Question: Is the change from the Benchmark to the Projected Future SCI less than or equal to .01?

Questions 15-26: Answer 'yes' to the one question that applies using the **system definitions** and **system efficiencies** below. Answer 'yes' to only one.

- Sample Question: Is the Change in irrigation efficiency XYZ%?

See page 5 for Irrigation Efficiencies Tables for use in ranking.



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%

Use the irrigation efficiency tables (left) to evaluate the change in efficiency, as follows: **Proposed system efficiency minus Current system efficiency = Change in efficiency**

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.....

Old Wheel Line to Wheel Line
55% to 65 %

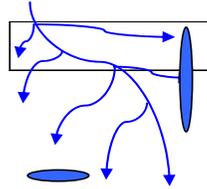
Old Wheel Line to Pivot
55% to 80%

OldPivot to Pivot
65% to 80%

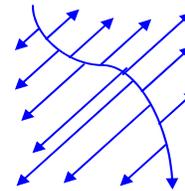
per discussions with Clare Prestwich,
NRCS National Irrigation Specialist

FLOOD IRRIGATION METHODS

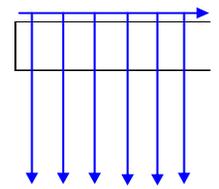
Use your professional judgment to choose the picture/description below that best matches the type of irrigation method in the field.



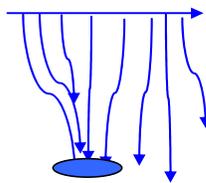
Uncontrolled Flood
Ridge
Irrigation



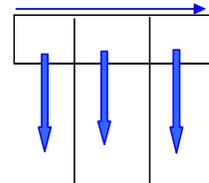
Controlled Flood
Ridge irrigation using
concrete ditch, gated
pipe, etc.



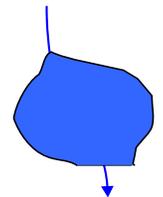
Controlled Flood
Earth ditch, Gated
Pipe, Corrighations,
Furrow, etc.
**Furrow
Graded**
< 2% Slope



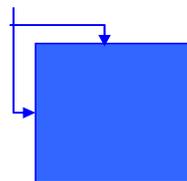
Uncontrolled Flood
Unlevel, no furrow, no
Corrighations, etc.



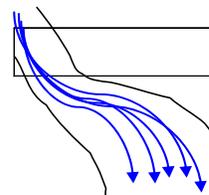
Controlled Flood
Borders, etc.
Border Graded
<= .5% slope



Uncontrolled Flood
Dam and flood



Level Basin
<= .03% slope



Uncontrolled Flood
Turn water out and let
it go.