



## Ranking Tool Summary

### for FY2016 - FY Irrigation Water Quantity (Draft)

**Description:**

Statewide on cropland or pasture. Resource concern is water quantity.

**Land Uses:**

Crop, Pasture

**Efficiency Score:**

Scoring Multiplier: 274.390

Scoring Ranges and Results Text:

High: 100 - 67	Medium: 66 - 34	Low: 33 - 0
Application ranks 'High' in this area	Application ranks 'Medium' in this area	Application ranks 'Low' in this area.

**Optional Notes:**

**National Priorities:**

Scoring Multiplier: 1.000

Scoring Ranges and Results Text:

High: 250 - 163	Medium: 162 - 82	Low: 81 - 0
Application ranks 'High' in this area	Application ranks 'Medium' in this area	Application ranks 'Low' in this area.

**Questions:**

Number	Question	Points
1	a. Meet regulatory requirements relating to animal feeding operations, or proactively avoid the need for regulatory measures?	15
1	b. Reduce sediment, nutrients or pesticides from agricultural operations located within a field that adjoins a designated "impaired water body" (TMDL, 303d, etc.)?	15
1	c. Reduce sediment, nutrients or pesticides from agricultural operations located within a field that adjoins a "non-impaired water body"?	5
2	a. Decrease aquifer overdraft?	15
2	b. Conserve water from irrigation system improvements and saved water will be available for other beneficial uses?	10
2	c. Conserve water in an area where the applicant participates in a geographically established or watershed-wide project?	5
3	a. Meet on-farm regulatory requirements relating to air quality or proactively avoid the need for regulatory measures?	15
3	b. Reduce on-farm generated green house gases such as CO2 (Carbon Dioxide), CH4 (Methane), and N2O (Nitrous Oxide)?	15
3	c. Increase on-farm carbon sequestration?	5
4	a. Reduce erosion to tolerable limits (Soil "T")?	15
4	b. Improve soil tilth, organic matter, structure, health, etc.?	5
5	a. Benefit on-farm habitat associated with threatened and endangered, at-risk, candidate, or species of concern as identified in a State wildlife plan?	15
5	b. Help retain wildlife and plant habitat on land exiting the Conservation Reserve	10

	Program (CRP)?	
6	a. Help manage or control noxious or invasive species on non-cropland?	10
6	b. Increase, or improve habitat to benefit pollinator or other targeted wildlife species?	10
6	c. Properly dispose of livestock carcasses?	5
6	d. Are identified in an Integrated Pest Management plan?	10
6	e. Are identified in a Nutrient Management plan?	10
6	f. Apply principles of adaptive nutrient management?	5
7	a. Reduce energy consumption on the agricultural operation?	15
7	b. Increase on-farm energy efficiency with practices and improvements identified in an approved energy audit equivalent to criteria required in Ag EMP?	10
7	c. Assist in implementing energy conservation measures that also reduce greenhouse gas emissions and other air pollutants?	10
8	a. Implementation of all conservation practices scheduled in the contract on the CPA-1155 within three years of date of obligation?	10
8	b. Improvement of existing conservation practices or conservation systems already in place at the time the application is accepted?	5
8	c. Implementation of practice(s) which will complete an existing conservation system or suite of practices?	5
Total Points		250

**State Issues:**

Scoring Multiplier: 1.000

Scoring Ranges and Results Text:

High: 250 - 163	Medium: 162 - 82	Low: 81 - 0
Application ranks 'High' in this area	Application ranks 'Medium' in this area	Application ranks 'Low' in this area.

**Questions:**

Sub-heading Number	Question Number	Question	Points
1		Conservation Activity Plan	
	1	Is the program application to support the development of a Conservation Activity Plan (CAP)? If answer is "Yes", do not answer any other state level questions. If answer is "No", proceed with evaluation to address the remaining questions in this section?	50
2		Wildlife - Will the proposed project improve habitat for at least one:	
	2	Species listed under the ESA as threatened or endangered?	25
	3	Species of greatest conservation need listed in the draft Utah Wildlife Action Plan that is other than an ESA T&E species.	15
3		Weeds - Will the proposed project contribute to:	
	4	The control of all invasive species present on the offered acres?	50
	5	The control of one invasive species present on the offered acres?	25
4		Water Quality - Will the proposed project improve water quality by reducing a TMDL impairment and is located:	
	6	Contiguous to or less than 1320 feet from the impaired water body?	50
	7	1321 to 2640 feet from the impaired water body?	30
	8	2641 to 5280 feet from the impaired water body?	15
5		Grazing Lands - Will the proposed project result in a change in the Grazing Response Index score of:	
	9	3 to 4	25
	10	2 to 2.9	20

	11	1 to 1.9	15
	12	0 to 0.9	10
6		Grazing Lands - Will the proposed project result in a Grazing Response Index score of:	
	13	3 to 4	25
	14	2 to 2.9	20
	15	1 to 1.9	15
	16	0 to 0.9	10
7		Pollinator Habitat - Will the proposed project increase the number of flowering plants in the planning area by:	
	17	Three or more species per season (spring, summer, and fall).	25
	18	Two species per season (spring, summer, and fall).	15
	19	One specie per season (spring, summer, and fall).	5
8		Soil Health - Will the proposed project result in a change in Soil Conditioning Index of:	
	20	0.5 or greater	50
	21	0.08 to 0.49	25
Maximum Points: 250    Total Points			520

**Local Issues:**

Scoring Multiplier: 1.050

Scoring Ranges and Results Text:

High: 380 - 260	Medium: 259 - 150	Low: 149 - 0
Application ranks 'High' in this area.	Application ranks 'Medium' in this area.	Application ranks 'Low' in this area.

**Questions:**

Sub-heading Number	Question Number	Question	Points
1		Integrated Pest Management (answer yes to only one of the following questions 1-2).	
	1	Will this application implement an advanced IPM plan to control local/county/state invasive/noxious pests and weeds? (plan must include maintaining records for scouting, alternative treatment methods, timing of application, least hazardous chemical use, etc.)	14
	2	Will this application implement a basic IPM plan to control local/county/state invasive/noxious pests and weeds? (limited scouting, timing of application & following label required)	7
2		Impaired Water Quality (answer yes to only one of the following questions 3-5).	
	3	Will practices be installed to improve water quality adjacent to and/or located less than 1320 feet from an identified water body (lake, stream, reservoir, TMDL nutrient impaired watershed, etc.) ?	22
	4	Will practices be installed to improve water quality between 1321 and 2640 feet from an identified water body (lake, stream, reservoir, TMDL nutrient impaired watershed, etc.)?	14
	5	Will practices be installed to improve water quality between 2641 and 5280 feet from an identified water body (lake, stream, reservoir, TMDL nutrient impaired watershed, etc.)?	7
3		Soils (answer yes to only one of the following questions 6-8).	
	6	Does the applicant have a current soils test AND are they applying manure/fertilizers as not to exceed the recommendations of this test for all	11

		lands this application will service. (current year test on annual crop or within three years on perennial crops)?	
	7	Will the applicant implement basic nutrient management in the contract (taking soil tests) and apply nutrients not to exceed recommendations?	11
	8	Will the applicant implement an advanced precision nutrient management plan in the contract using tools such as variable rate applicators, NDVI, yield monitoring, and GPS guidance technology?	22
4		Prime and Unique Farmland.	
	9	Will 50% or more of the land in this contract fall within prime or unique farmland or lands with soils of statewide or local importance AND does 1 or more of the planned practices protect/improve the condition of that important/sensitive agricultural land?	14
5		Soil Health (answer yes to only one of the following 10-12).	
	10	Will the applicant implement in the contract the No-Till management practice?	43
	11	Will the applicant implement in the contract the Strip-Till management practice?	29
	12	Will the applicant implement in the contract the Mulch Till reduced tillage management practice?	14
6		Soil Health Cover Crops (answer yes to only one of the following 13-14).	
	13	Will there be a one species Cover crop in the rotation?	11
	14	Will there be a five species (minimum) Cover crop in the rotation?	32
	15	Will 1 or more of the following conservation practices be installed? (buffer, field border, filter strip, grassed waterway, strip cropping)?	5
7		Change in Soil Conditioning Index (answer yes to only one of the following 16-21).	
	16	Is the change from the Benchmark to the Projected Future SCI less than or equal to .08?	3
	17	13 Is the change from the Benchmark to the Projected Future SCI greater than .08 and less than or equal to .4?	7
	18	Is the change from the Benchmark to the Projected Future SCI greater than .4 and less than or equal to .6	11
	19	Is the change from the Benchmark to the Projected Future SCI greater than .6 and less than or equal to .8?	14
	20	Is the change from the Benchmark to the Projected Future SCI greater than .6 and less than or equal to .9?	22
	21	Is the change from the Benchmark to the Projected Future SCI greater than .9?	29
8		Irrigation Efficiency (answer yes to only one of the following 22-27). Use FIRI tool to determine Potential Water Savings.	
	22	Is the change in Potential Water Savings as calculated by FIRI <15%?	0
	23	Is the change in Potential Water Savings as calculated by FIRI 15% to 20%?	14
	24	Is the change in Potential Water Savings as calculated by FIRI 21% to 30%?	21
	25	Is the change in Potential Water Savings as calculated by FIRI 31% to 40%?	31
	26	Is the change in Potential Water Savings as calculated by FIRI >40%?	43
	27	Will this application include the installation of a microirrigation system?	100
9		Cost Effectivness (answer yes to only one of the following 28-36).	
	28	Will the cost per acre of this project be less than \$250 an acre?	54
	29	Will the cost per acre of this project be between \$250 and \$500 acre?	43
	30	Will the cost per acre of this project be between \$501 and \$750 acre?	36
	31	Will the cost per acre of this project be between \$751 and \$1000 acre?	29
	32	Will the cost per acre of this project be between \$1001 and \$1250 acre?	22

	33	Will the cost per acre of this project be between \$1251 and \$1500 acre?	14
	34	Will the cost per acre of this project be between \$1501 and \$1750 acre?	7
	35	Will the cost per acre of this project be between \$1751 and \$2000 acre?	3
	36	Will the cost per acre of this project be greater than \$2000 acre?	-25
10		Partner Contribution (answer yes to only one of the following 37-38).	
	37	Does this application have secured partner funding for financial and technical assistance that will result in reduced NRCS obligations? (Select yes if secured funding is >25% of the total project cost.)	50
	38	Does this application have secured partner funding for financial and technical assistance that will result in reduced NRCS obligations? (Select yes if secured funding is 25% or less of the total project cost.)	25
11		Contract Compliance (if applicable).	
	39	Has the applicant had a Farm Bill Contract terminated for non-compliance?	-100
	40	Does the applicant have an active Farm Bill contract that is currently not on schedule, in non-compliance or practices in arrears?	-50
		Maximum Points: Total Points	659

**Selected Resource Concerns and Practices:**

Insufficient Water: Inefficient Use of Irrigation Water

- Access Control (472)
- Access Road (560)
- Agrichemical Handling Facility (309)
- Agricultural Energy Management Plan - Wr (128)
- Air Filtration and Scrubbing (371)
- Alley Cropping (311)
- Amending Soil Properties with Gypsum Pro (333)
- Amendments for Treatment of Ag Waste (591)
- Anaerobic Digester (366)
- Animal Mortality Facility (316)
- Anionic Polyacrylamide (PAM) Application (450)
- Aquaculture Ponds (397)
- Aquatic Organism Passage (396)
- Bedding (310)
- Bivalve Aquaculture Gear and Biofouling (400)
- Brush Management (314)
- Building Envelope Improvement (672)
- Channel Bed Stabilization (584)
- Clearing and Snagging (326)
- Combustion System Improvement (372)
- Composting Facility (317)
- Comprehensive Air Quality Management Pla (126)
- Comprehensive Nutrient Management Plan - (102)
- Conservation Cover (327)
- Conservation Crop Rotation (328)
- Conservation Plan Supporting Organic Tra (138)
- Conservation Plan Supporting Transition (134)
- Constructed Wetland (656)
- Contour Buffer Strips (332)
- Contour Farming (330)
- Contour Orchard and Other Perennial Crop (331)
- Cover Crop (340)
- Critical Area Planting (342)
- Cross Wind Ridges (588)
- Cross Wind Trap Strips (589C)
- Dam (402)
- Dam, Diversion (348)
- Deep Tillage (324)

Denitrifying Bioreactor (605)  
Dike (356)  
Diversion (362)  
Drainage Water Management (554)  
Drainage Water Management Plan - Written (130)  
Dry Hydrant (432)  
Dust Control from Animal Activity on Ope (375)  
Dust Control on Unpaved Roads and Surfac (373)  
Early Successional Habitat Development/M (647)  
Emergency Animal Mortality Management (368)  
Farmstead Energy Improvement (374)  
Feed Management (592)  
Feed Management Plan - Written (108)  
Fence (382)  
Field Border (386)  
Field Operations Emissions Reduction (376)  
Filter Strip (393)  
Firebreak (394)  
Fish and Wildlife Habitat Plan - Written (142)  
Fish Raceway or Tank (398)  
Fishpond Management (399)  
Forage and Biomass Planting (512)  
Forage Harvest Management (511)  
Forest Management Plan - Written (106)  
Forest Stand Improvement (666)  
Forest Trails and Landings (655)  
Fuel Break (383)  
Grade Stabilization Structure (410)  
Grassed Waterway (412)  
Grazing Land Mechanical Treatment (548)  
Grazing Management Plan - Written (110)  
Ground Water Testing (355)  
Heavy Use Area Protection (561)  
Hedgerow Planting (422)  
Herbaceous Weed Control (315)  
Herbaceous Wind Barriers (603)  
High Tunnel System (325)  
Hillside Ditch (423)  
Integrated Pest Management (IPM) (595)  
Integrated Pest Management Plan - Writte (114)  
IPM Herbicide Resistance Weed Conservati (154)  
Irrigation Canal or Lateral (320)  
Irrigation Ditch Lining (428)  
Irrigation Field Ditch (388)  
Irrigation Land Leveling (464)  
Irrigation Pipeline (430)  
Irrigation Reservoir (436)  
Irrigation System, Microirrigation (441)  
Irrigation System, Surface and Subsurfac (443)  
Irrigation System, Tailwater Recovery (447)  
Irrigation Water Management (449)  
Irrigation Water Management Plan - Writt (118)  
Karst Sinkhole Treatment (527)  
Land Clearing (460)  
Land Reclamation, Abandoned Mined Lan (543)  
Land Reclamation, Landslide Treatment (453)  
Land Reclamation, Toxic Discharge Contro (455)  
Land Smoothing (466)  
Lighting System Improvement (670)  
Lined Waterway or Outlet (468)  
Livestock Pipeline (516)

Livestock Shelter Structure (576)  
Mine Shaft and Adit Closing (457)  
Mole Drain (482)  
Monitoring Well (353)  
Mulching (484)  
Multi-Story Cropping (379)  
Nutrient Management (590)  
Nutrient Management Plan - Written (104)  
Obstruction Removal (500)  
On-Farm Secondary Containment Facility (319)  
Open Channel (582)  
Pollinator Habitat Plan - Written (146)  
Pond (378)  
Pond Sealing - Clay Treatment (521D)  
Pond Sealing or Lining, Bentonite Sealant (521C)  
Pond Sealing or Lining, Flexible Membrane (521A)  
Pond Sealing or Lining, Soil Dispersant (521B)  
Precision Land Forming (462)  
Prescribed Burning (338)  
Prescribed Burning Plan - Written (112)  
Prescribed Grazing (528)  
Pumping Plant (533)  
Range Planting (550)  
Recreation Area Improvement (562)  
Recreation Land Grading and Shaping (566)  
Renewable Energy System (716)  
Residue Mgmt, Mulch Till (345)  
Residue Mgmt-No-Till/Strip Till/Direct S (329)  
Restoration and Management of Declining (643)  
Riparian Forest Buffer (391)  
Riparian Herbaceous Cover (390)  
Road/Trail/Landing Closure and Treatment (654)  
Rock Barrier (555)  
Roof Runoff Structure (558)  
Roofs and Covers (367)  
Row Arrangement (557)  
Salinity and Sodic Soil Management (610)  
Sediment Basin (350)  
Shallow Water Development and Management (646)  
Short Term Storage of Animal Waste and B (318)  
Silvopasture Establishment (381)  
Spoil Spreading (572)  
Spring Development (574)  
Sprinkler System (442)  
Stormwater Runoff Control (570)  
Stream Crossing (578)  
Stream Habitat Improvement and Management (395)  
Streambank and Shoreline Protection (580)  
Stripcropping (585)  
Structure for Water Control (587)  
Structures for Wildlife (649)  
Subsurface Drain (606)  
Surface Drain, Field Ditch (607)  
Surface Drain, Main or Lateral (608)  
Surface Roughening (609)  
Terrace (600)  
Trails and Walkways (575)  
Tree/Shrub Establishment (612)  
Tree/Shrub Pruning (660)  
Tree/Shrub Site Preparation (490)  
Underground Outlet (620)

Upland Wildlife Habitat Management (645)  
Vegetated Treatment Area (635)  
Vegetative Barrier (601)  
Vertical Drain (630)  
Waste Facility Closure (360)  
Waste Hauling (321)  
Waste Recycling (633)  
Waste Separation Facility (632)  
Waste Storage Facility (313)  
Waste Transfer (634)  
Waste Treatment (629)  
Waste Treatment Lagoon (359)  
Water and Sediment Control Basin (638)  
Water Harvesting Catchment (636)  
Water Well (642)  
Watering Facility (614)  
Waterspreading (640)  
Well Decommissioning (351)  
Wetland Creation (658)  
Wetland Enhancement (659)  
Wetland Restoration (657)  
Wetland Wildlife Habitat Management (644)  
Windbreak/Shelterbelt Establishment (380)  
Windbreak/Shelterbelt Renovation (650)  
Woody Residue Treatment (384)

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