

## CSP-2019-1 MT - Ag Land Pasture

### Soil Erosion

#### Sheet and Rill Erosion

##### Planning Criteria

Permanent ground cover > 90% and slope less than 10%; OR, The water erosion rate is less than or equal to T.

##### Planning Criteria Met

Yes ☐ No ☐

##### Evaluation Tests

Plant cover controls active erosion (shallow less than 1 foot deep rills and gullies) and runoff from normal rain events; AND, No litter dams or terracettes are present.

##### Evaluation Test Met

Yes ☐ No ☐

### Wind Erosion

##### Planning Criteria

Permanent ground cover >90% and slope less than 10%; OR, The wind erosion rate is less than or equal to T.

##### Planning Criteria Met

Yes ☐ No ☐

##### Evaluation Tests

Residual forage heights meet or exceed the State standards for controlling wind erosion.

##### Evaluation Test Met

Yes ☐ No ☐

### Classic Gully Erosion

##### Planning Criteria

Classic gullies are not present; Or, Classic gully management is adequate to stop the progression of head cutting and widening and offsite impacts are minimized by vegetation and/or structures.

##### Planning Criteria Met

Yes ☐ No ☐

##### Evaluation Tests

Classic Gullies are not present; Or, All classic gullies are stabilized; AND, All areas expected to have high erosion rates are stable.

##### Evaluation Test Met

Yes ☐ No ☐

## **CSP-2019-1 MT - Ag Land Pasture**

### **Streambank, Shoreline, Water Conveyance Channels**

#### **Planning Criteria**

For shorelines and water conveyance channels; banks are stable or commensurate with normal geomorphological processes; AND, If bank erosion is present, it is beyond the client's control or commensurate with normal geomorphological processes; AND, For streambanks, SVAP2 bank condition element score > 5. If shorelines or water conveyance channels are not present, set this planning criteria to NA.

#### **Planning Criteria Met**

Yes ☐ No ☐

#### **Evaluation Tests**

Excluding all fundamentally unstable, natural geomorphic streambanks and shorelines, all streambanks and shorelines on the land use show few signs of erosion or bank failure; AND, Each is stable and protected with natural materials. If shorelines and water conveyance channels do not exist on the land management system, set this test statement to NA.

#### **Evaluation Test Met**

Yes ☐ No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Soil Quality Degradation

#### Organic Matter Depletion

##### **Planning Criteria**

Organic matter within the soil is managed by means of proper rotational grazing and other grazing management practices; AND, the Pasture Condition Score (PCS) -plant cover element score is  $\geq 4$ ; AND, The PCS - plant residue element score is  $\geq 4$ .

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

Proper soil health is evidenced by productive and desirable plants dominating the management system. There are no extensive dead or unproductive areas.

##### **Evaluation Test Met**

Yes ☐ No ☐

#### Compaction

##### **Planning Criteria**

Soil compaction is not a problem: AND, Activities do not cause soil compaction problems AND, Can be documented with prior conservation planning or other on-site evaluation methods.

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

There are no extensive bare spots or dead areas in the land management system beyond what would be considered acceptable "sacrifice" areas.

##### **Evaluation Test Met**

Yes ☐ No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Concentration of Salts and other Chemicals

#### Planning Criteria

Salinity/sodicity problems do not exist: OR, Conservation practices and managements are in place to mitigate on-site effects.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Irrigation water is managed to maintain a balance of soil moisture not to exceed Field Capacity or get below wilting point (unless water quantity is a limitation)? Methods include: moisture by feel, soil moisture monitoring with sensors, evapotranspiration monitoring, or other checkbook type methods. If the land management system is not irrigated, set this test statement to NA.

#### Evaluation Test Met

Yes ☐ No ☐

There are no areas of extensive bare ground, or largely unvegetated areas, present in areas of high salts. If there are no areas of high salts on the land management system, set this test statement to YES.

Yes ☐ No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Excess Water

#### Runoff and Flooding and Ponding

##### **Planning Criteria**

Excess water is managed to minimize the impact on conservation measures and/or crop production.

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

Measures are applied such as prescribed grazing, grassed waterways, and field borders to reduce excessive runoff; OR, If flooding is a concern pastures are managed within the seasonal flooding periods; OR, Where ponding is a concern land leveling or shallow surface drains prevent ponding of water that limits pasture production.

##### **Evaluation Test Met**

Yes ☐ No ☐

## CSP-2019-1\_MT - Ag Land\_Pasture

### Insufficient Water

#### Inefficient Use of Irrigation Water

##### **Planning Criteria**

The irrigation system components and management result in a Farm Irrigation Rating Index > 60; AND, Meets applicable State in-stream flow and lake and pond water levels requirements. If the land management system is not irrigated, or equipment on this land management system is not used to irrigate, set this planning criteria to NA.

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

An irrigation water management (IWM) plan is followed that meets the crop's needs, while maximizing irrigation water efficiency. The IWM plan schedules water application based on soil moisture monitoring and/or evapotranspiration monitoring, measures and records the amount of water used to irrigate, and the irrigation system's distribution uniformity has been evaluated and necessary changes were made. If the land management system is not irrigated, or equipment on this land management system is not used to irrigate, set this test statement to NA.

##### **Evaluation Test Met**

Yes ☐ No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Water Quality Degradation

#### Pesticides in Surface Water

##### **Planning Criteria**

##### **Planning Criteria Met**

Pesticides are stored, handled, disposed and applied to prevent runoff, spills, leaks and leaching; AND, Conservation practices and techniques are in place to minimize ground water impacts.

Yes ☐ No ☐

##### **Evaluation Tests**

##### **Evaluation Test Met**

Pesticides are not applied or stored on this land management system; Or, Pesticides are applied using a site-specific mixture of prevention, avoidance, monitoring, and suppression (PAMS) strategies. Environmental risk screening tool are used (such as WIN-PST or similar LGU approved tool); AND, Application rates and timing are compliant with the label.

Yes ☐ No ☐

#### Pesticides in Ground Water

##### **Planning Criteria**

##### **Planning Criteria Met**

Pesticides are stored, handled, disposed and applied to prevent runoff, spills, leaks and leaching; AND, Conservation practices and techniques are in place to minimize ground water impacts.

Yes ☐ No ☐

##### **Evaluation Tests**

##### **Evaluation Test Met**

Pesticides are not applied or stored on this land management system; OR, Pesticides are applied using a site-specific mixture of prevention, avoidance, monitoring, and suppression (PAMS) strategies; AND, Environmental risk screening tool are used (such as WIN-PST or similar LGU approved tool); AND, Application rates and timing are compliant with the label.

Yes ☐ No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Nutrients in Surface Water

#### Planning Criteria

Organic or inorganic nutrients are not applied and grazing unit is not adjacent to streams, ponds, or lakes and there are no confined livestock areas; OR, The Pasture Condition Score - streambank/shoreline erosion element score is  $\geq 4$ ; AND, The Pasture Condition Score - livestock concentration areas element score is  $\geq 4$ ; AND, Nutrients are applied and based on a soil test, tissue test or nutrient budget.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Livestock access to streams is limited to short periods of time and small areas.

#### Evaluation Test Met

Yes ☐ No ☐

Nutrients are not applied; OR, If nutrients are applied, they do not degrade surface water quality; AND, Water use is not limited by nutrient levels.

Yes ☐ No ☐

### Nutrients in Ground Water

#### Planning Criteria

Organic or inorganic nutrients are not applied ; OR, Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields and conservation practices; AND, Management activities are in place to minimize ground water impacts.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Nutrients are not applied to this land management system; OR, If nutrients are applied, they do not degrade ground water quality; AND, Water use is not limited.

#### Evaluation Test Met

Yes ☐ No ☐



## CSP-2019-1 MT - Ag Land Pasture

### Salts in Surface Water

#### Planning Criteria

Surface salt concentrations are managed to mitigate transport to surface water. If surface salts are not an issue, set this planning criteria to NA.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Surface salt concentrations are managed to mitigate transport to surface water. If surface salts are not an issue, set this test statement to NA.

#### Evaluation Test Met

Yes ☐ No ☐

### Excess Pathogens and Chemicals from Manure, Bio-solids or Compost Applications in Surface Water

#### Planning Criteria

Potential sources of pathogens or pharmaceuticals are not applied on the land; OR, Organic materials are applied, stored, and/or handled to mitigate negative impacts to surface water sources.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Livestock access to stream is controlled; OR, Livestock are limited to small watering or crossing areas.

#### Evaluation Test Met

Yes ☐ No ☐

Manure, compost, or bio-solids are not applied; OR, Manure, compost, or bio-solids are applied per soil test recommendations and Land Grant University best management practices, and grazing management optimizes applied products.

Yes ☐ No ☐

### CSP-2019-1 MT - Ag Land Pasture

#### Petroleum, Heavy Metal and Other Pollutants Transported to Surface Water

##### Planning Criteria

##### Planning Criteria Met

Activities do not present the potential for contamination by petroleum, heavy metals and other pollutants. If present, potential pollutants are stored and handled to avoid runoff to groundwater.

Yes ☐

No ☐

##### Evaluation Tests

##### Evaluation Test Met

Fuel storage does not occur on this land management system; OR, If required, the producer has and is following a Spill Prevention, Control, and Countermeasure (SPCC) Plan; OR, The fuel storage area and tank is located: - above the 100-year floodplain, - a minimum of 100 feet from any river, stream, ditch, pond, lake, sinkhole, wetland, or water well; AND, Within a stable place designed to provide secondary containment if the primary means were to fail.

Yes ☐

No ☐

#### Petroleum, Heavy Metal and Other Pollutants Transported to Ground Water

##### Planning Criteria

##### Planning Criteria Met

Activities do not present the potential for contamination by petroleum, heavy metals and other pollutants. If present, potential pollutants are stored and handled to avoid seepage to groundwater.

Yes ☐

No ☐

##### Evaluation Tests

##### Evaluation Test Met

Fuel storage does not occur on this land management system; OR, If required, the producer has and is following a Spill Prevention, Control, and Countermeasure (SPCC) Plan; OR, The fuel storage area and tank is located: - above the 100-year floodplain, - a minimum of 100 feet from any river, stream, ditch, pond, lake, sinkhole, wetland, or water well; AND, Within a stable place designed to provide secondary containment if the primary means were to fail.

Yes ☐

No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Excessive Sediment in Surface Water

#### Planning Criteria

Permanent ground cover > 90% and slope less than 10% and classic gullies are not present; OR, Upslope treatment and buffer practices address concentrated flows to water bodies; AND, The SVAP2 - bank condition  $\geq 5$ ; AND, The livestock and vehicle water crossings are stable; AND, The water erosion rate is less than or equal to T; AND, Wind erosion rate is less than or equal to T.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Plant cover controls active erosion and runoff from normal rain events; AND, Litter dams are minimized.

#### Evaluation Test Met

Yes ☐ No ☐

### Elevated Water Temperature

#### Planning Criteria

Water courses on or adjacent to the site are not designated by a State Agency as a temperature impairment; OR, The SVAP2 - riparian area quality element score is  $\geq 5$ ; AND, The SVAP2 - riparian area quantity element score is  $\geq 5$ ; AND, The SVAP2 - canopy cover element score is  $\geq 6$ ; OR, Existing conservation practices are in place to address water temperature. If water courses are not present, set this planning criteria to NA.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Surface water temperatures do not limit use for fish, wildlife, invertebrates, or other intended purposes. If waterbodies are not present on this land management system, set the test statement to NA.

#### Evaluation Test Met

Yes ☐ No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Air Quality Impacts

#### Emissions of Ozone Precursors

##### **Planning Criteria**

Operations that produce ozone precursor emissions are not present; OR, or are managed to reduce emissions. Ozone precursor producing activities may include: Engines (combustion source), Pesticide application, Burning, CAFO /manure management, or fertilization (manure/commercial).

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

Pesticides are not applied; OR, An IPM plan is followed which reduces ozone precursors. IPM includes applications of pesticides, including fumigants, be applied in a way that emissions of ozone precursors are reduced; Application methods may include: spot spraying, pest/target sensing application equipment, alternative pesticide formulations, or low emission fumigation methods.

##### **Evaluation Test Met**

Yes ☐ No ☐

#### Emission of Greenhouse Gases (GHGs)

##### **Planning Criteria**

Activities that produce GHGs emissions are not present: OR, Activities that produce GHGs emissions are managed to reduce those emissions; AND, Carbon sequestration is enhanced through reduced tillage methods or other practices. GHG producing activities that should be considered include: Fertilization (manure/commercial), Tillage methods, grazing management, and forestry practices; AND, GHGs are not regulated in this planning area.

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

Nitrogen is not applied: OR, Nitrogen is applied as close as possible to crop uptake (within 30 days prior to crop planting or greenup) at recommended application rates.

##### **Evaluation Test Met**

Yes ☐ No ☐

**CSP-2019-1 MT - Ag Land Pasture****Objectionable Odors****Planning Criteria**

Activities such as pesticide or manure application are managed to reduce objectionable odors; AND, Odor sources are not regulated in this planning area; AND, Documented episodes or complaints of odor nuisance have not occurred.

**Planning Criteria Met**

Yes ☐ No ☐

**Evaluation Tests**

Manure is not applied on this land management system; OR, Manure is immediately incorporated; OR, Manure is only applied when wind direction is away from human occupied areas.

**Evaluation Test Met**

Yes ☐ No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Degraded Plant Condition

#### Undesirable Plant Productivity and Health

##### Planning Criteria

The Pasture Condition Score is 30 or above. Plants are adapted to the site, meet production goals and do not negatively impact other resources.

##### Planning Criteria Met

Yes ☐ No ☐

##### Evaluation Tests

Plants are perennial, adapted to the site, maintained at minimal stubble heights, productive and healthy.

##### Evaluation Test Met

Yes ☐ No ☐

#### Inadequate Structure and Composition

##### Planning Criteria

Plant communities contain adequate diversity, composition and structure to support desired ecological functions for the ecological site.

##### Planning Criteria Met

Yes ☐ No ☐

##### Evaluation Tests

The current plants provide the desired habitat structure and composition. State identified invasive plants and noxious weeds are controlled.

##### Evaluation Test Met

Yes ☐ No ☐

#### Excessive Plant Pest Pressure

##### Planning Criteria

Plant pest damage to plants is below economic or environmental thresholds; AND, Plant pests, including noxious and invasive species are managed.

##### Planning Criteria Met

Yes ☐ No ☐

##### Evaluation Tests

Weeds, insects, and diseases do not limit crop production.

##### Evaluation Test Met

Yes ☐ No ☐

## CSP-2019-1\_MT - Ag Land\_Pasture

### Fish and Wildlife - Inadequate Habitat

#### Inadequate Habitat - Food

##### **Planning Criteria**

The WHSI rating is  $\geq 0.5$ ; AND, (when surface stream present) The SVAP2 - fish habitat complexity element score is  $\geq 7$ ; AND, The SVAP2 - aquatic invertebrate habitat element score is  $\geq 7$ ; OR, Conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds; OR, Food is available in quality and extent to support habitat requirements for the species of interest.

##### **Planning Criteria Met**

Yes ☐ No ☐

##### **Evaluation Tests**

Designated areas are planted as food and habitat for pollinators/beneficial insects; AND, Protected from disruption. For example, planted to nectar and pollen producing plants and protected from disruption - chemical, biological, or mechanical.

##### **Evaluation Test Met**

Yes ☐ No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Inadequate Habitat - Cover/Shelter

#### Planning Criteria

#### Planning Criteria Met

The WHSI rating is  $\geq 0.5$ ; AND, (when surface stream present) the SVAP2 - barriers to movement element score is  $\geq 7$ ; AND, The SVAP2 - fish habitat complexity element score is  $\geq 7$ ; AND, The SVAP2 - aquatic invertebrate habitat element score is  $\geq 7$ ; OR, Conservation practices and management practices are in place that meet or exceed species or guild-specific habitat model thresholds; OR, Habitat cover is of available quality and extent to support requirements for the species of interest.

Yes ☐ No ☐

#### Evaluation Tests

#### Evaluation Test Met

Grazing heights are maintained at a minimum of 6 inches average over winter for mid/tall grass plant communities; AND, 4 inches average over winter for shortgrass plant communities.

Yes ☐ No ☐

Designated areas are planted as food and habitat for pollinators/beneficial insects. For example, planted to nectar and pollen producing plants and protected from disruption--chemical, biological, or mechanical.

Yes ☐ No ☐

Haying operations include at least two of the following activities: (a) harvest occurs from the center of the field outward to provide better escape cover, (b) flushing bars are mounted on harvesting equipment, (c) mowing occurs during daylight hours, or (d) mowing speeds are reduced during primary nesting season.

Yes ☐ No ☐



## CSP-2019-1 MT - Ag Land Pasture

### Inadequate Habitat - Water

#### Planning Criteria

The WHSI rating is  $\geq 0.5$ ; AND, (when surface stream present) The SVAP2 - aquatic invertebrate habitat element score is  $\geq 7$ ; OR, Conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds; OR, Water is available in quality and extent to support habitat requirements for the species of interest.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Developments in the flood plain, stream water withdrawals, flow augmentation, or water control structures may be present, but do not significantly alter the natural flow regime.

#### Evaluation Test Met

Yes ☐ No ☐

### Inadequate Habitat - Habitat Continuity (Space)

#### Planning Criteria

The WHSI rating is  $\geq 0.5$ ; AND, (when surface stream present) The SVAP2 - barriers to movement element score is  $\geq 7$ ; AND, The SVAP2 - aquatic invertebrate habitat element score is  $\geq 7$ ; OR, Conservation practices and managements are in place that meet or exceed species or guild-specific habitat model thresholds; OR, The connectivity of habitat components are adequate to support stable populations of target species.

#### Planning Criteria Met

Yes ☐ No ☐

#### Evaluation Tests

Existing fences allow wildlife movement without harm.

#### Evaluation Test Met

Yes ☐ No ☐

The land adjacent to a stream, river, or other waterbody on the side or sides you control does: - have diverse, natural plant cover typical to that along streams in your area; AND, Extend from the stream bank or shoreline for a distance of 35 feet; OR, (if applicable) The minimum State buffer-width requirement, whichever is greater.

Yes ☐ No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Livestock Production Limitation

#### Inadequate Feed and Forage

##### Planning Criteria

##### Planning Criteria Met

Livestock forage, roughage, and supplemental nutritional requirements are met.

Yes ☐ No ☐

##### Evaluation Tests

##### Evaluation Test Met

The existing forage quantity and quality are expected to meet the livestock needs and goals.

Yes ☐ No ☐

#### Inadequate Shelter

##### Planning Criteria

##### Planning Criteria Met

Artificial or natural shelters meet animal health needs.

Yes ☐ No ☐

##### Evaluation Tests

##### Evaluation Test Met

Adequate shelter is provided to meet the needs of the livestock throughout the period the land management system (LMS) is utilized by livestock. If livestock do not use this LMS, set the test statement to NA.

Yes ☐ No ☐

#### Inadequate Water

##### Planning Criteria

##### Planning Criteria Met

Water of acceptable quality and quantity is adequately distributed to meet animal needs.

Yes ☐ No ☐

##### Evaluation Tests

##### Evaluation Test Met

The livestock have enough drinking water of good quality. If livestock do not use this land management system, set the test statement to NA.

Yes ☐ No ☐

## CSP-2019-1 MT - Ag Land Pasture

### Inefficient Energy Use

#### Farming/Ranching Practices and Field Operations

##### Planning Criteria

##### Planning Criteria Met

If nutrients are applied, a nutrient budget is used to determine all nutrient application rates; AND, If irrigated, improved efficiency irrigation pumps are being used on the majority of irrigated pastures.

Yes ☐ No ☐

##### Evaluation Tests

##### Evaluation Test Met

Irrigation water is being managed to maintain a balance of soil moisture not to exceed Field Capacity or get below wilting point (unless water quantity is a limitation). Methods include: soil moisture monitoring with sensors, evapotranspiration monitoring, or other checkbook type methods. If the land management system is not irrigated, set this test statement to NA.

Yes ☐ No ☐

Nutrients are not applied; OR, If nutrients are applied, a nutrient budget is used to determine all application rates, including: - Realistic yield goals, - Nutrient uptake requirements, and - Available nutrient accounting for each of the following: (a) N, P, K from representative soil tests (less than or equal to 3yrs), (b) Soil organic matter mineralization, (c) Legumes in rotation, (d) Previous applications of manure and other organic based materials, (e) Planned post-harvest residual soil test levels, (f) Available nutrient analysis for each nutrient source, and (g) Available nutrient uptake efficiencies from planned application rate, source, method, timing and placement. All state specific application setbacks are maintained for all nutrient applications.

Yes ☐ No ☐