United States Department of Agriculture

Conservation Planning Workbook Montana

Helping People Help the Land

Landowner Name: _____

Date: _____

Application Number: _____

Montana
Natural Resources Conservation Service
mt.nrcs.usda.gov

September 2025

Purpose

NRCS conservation planners follow the nine-step conservation planning process to identify resource concerns and objectives, inventory and analyze data on resource conditions, formulate and evaluate alternatives for conservation treatment, make informed decisions, and implement and help producers evaluate conservation plans. The NRCS conservation planning process uses planning criteria, specified for each resource concern, as a guidepost for setting conservation goals. The Conservation Planning Workbook is a tool to support this process by helping to determine landowner objectives and by inventorying landuses.

Use the Glossary at the end of this document to find definitions of specific natural resource and NRCS terms.

If you have previously completed a landowner workbook and your local field office already has the information, please fill out the Addendum at the end of this book.

Table of Contents

CONSERVATION PLANNING DOCUMENTATION AND RESOURCE ASSESSMENT

Date:_____ Name of Decision Maker: _____

Business or Farm/Ranch Name: _____

Address: _____

City: _____ State: _____

County: _____ ZIP Code: _____

Home Phone: _____ Email Address: _____

Township, Range, Section(s): _____

Farm and Tract Number (s): _____

Acres Owned and Operated: _____

Acres Rented/Leased (private and public): _____

Identify Your Objectives

What do you want to accomplish with your conservation plan? Conservation plans developed and implemented with clearly defined objectives are most successful. Set realistic objectives that can be reached with small, achievable steps. To have positive outcomes, you need to describe clearly what you want to happen on your land and where you want to be within a selected time frame. Ask yourself, “What do I want my place to look like in five years?” A clear objective statement will assist you and NRCS in developing a conservation plan that is right for you.

Natural Resource Objectives

Short term: _____

_____

_____

_____

Long term: _____

_____

_____

_____

Production and Economic Objectives

Short term: _____

_____

_____

_____

Long term: _____

_____

_____

_____

Management Objectives

Short term: _____

_____

_____

_____

Long term: _____

_____

_____

_____

Soil Section

S1. Do you have water (sheet and rill) erosion **AND/OR** wind erosion on any of the following land uses? See images for examples and indicate where on your property. ☐ Yes ☐ No

Land Use		Description of issue and location - mark on map
☐	Crop	
☐	Forest	
☐	Pasture/ Range	
☐	Associated Ag Land/ Farmstead	
☐	Other Rural Land	

Classic Gully

Ephemeral Gully

Rill Erosion

Wind Erosion

S2. Do you have ephemeral gully erosion **AND/OR** classic gully erosion on any land use? See images for examples and indicate where on your property. ☐ Yes ☐ No

Land Use		Description of issue and location - mark on map
☐	Crop	
☐	Forest	
☐	Pasture/ Range	
☐	Associated Ag Land/ Farmstead	
☐	Other Rural Land	

Soil Section

S3. Do you have bank erosion on any land use? Pick the description below that best matches and indicate where on your property.

Category	Description of issue and location - mark on map
☐ **Stable:** Banks are protected by roots of natural vegetation, wood, and rock. Minimal trampling and/or sloughing.	
☐ **Moderately Stable:** Evidence of bank erosion or failures: active sloughing, downcutting, and vertical slopes are minimal; some with reestablishment of vegetation. Eroding at crossings and entrances. Movement, distribution and/or management of water along edges of water bodies slightly altered.	
☐ **Moderately Unstable:** Excessive bank erosion or active bank failures. Very little protection of banks by roots of natural vegetation, wood, or rock. Fabricated structures cover more than half of reach or entire bank. Sloughing and vertical banks active erosion. Movement, distribution and/or management of water along edges of water bodies moderately to highly altered.	
☐ **Unstable:** Numerous active bank failures. No bank protection by roots of natural vegetation, wood, or rock. Riprap and/or other structures dominate banks. Major sloughing. Major vertical down cutting. Movement, distribution and/or management of water along edges of water bodies severely altered.	

S4. Do you have evidence of compaction including ponding, stunted plant growth, or root growth limitation? Indicate where on your property. ☐ Yes ☐ No

Land Use	Description of issue and location - mark on map
☐ Crop	
☐ Forest	
☐ Pasture/ Range	
☐ Associated Ag Land/ Farmstead	
☐ Other Rural Land	

Soil Section

S5. Do you have soil organic matter depletion, soil organism habitat loss or degradation, and/or aggregate instability? Pick the description below that best matches and indicate where on your property.

Category	Description of issue and location - mark on map
☐ **None:** Living vegetation is absent or very sparse. Plant litter and woody debris are absent or very sparse.	
☐ **Low:** Living vegetation is predominantly annuals. A few perennials may be present. A soil biological crust has not formed. Plant litter or woody debris is scattered leaving most of ground surface uncovered. No duff layer present.	
☐ **Moderate:** Living vegetation covers most of the ground surface. Plant residue is mostly fragile (broadleaf plants) and decomposes quickly. Woody debris is mostly fine. A thin duff layer may be present. A soil biological crust may be present on semi-arid and arid sites.	
☐ **High:** Ground is completely covered by a combination of living vegetation, fragile (broadleaf) and non-fragile (grass) plant residue, or woody debris. A duff layer, or protective biological crust is present.	

S6. Do you have concentrations of salts that limit productivity or desired use? Indicate where on your property. ☐ Yes ☐ No

Land Use	Description of issue and location - mark on map
☐ Crop	
☐ Forest	
☐ Pasture/ Range	
☐ Associated Ag Land/ Farmstead	
☐ Other Rural Land	

Water Section

W1. Which surface water features are on your property? Indicate where on your property.

Category	Description of location - mark on map
☐ **Lake or Pond:** Includes vernal pools	
☐ **River:** typically non-wadeable during summer flows	
☐ **Seep:** a moist or wet area where water, usually groundwater, reaches the earth's surface from an underground aquifer	
☐ **Spring:** water moving underground finds an opening to the land surface and emerges, sometimes as just a trickle, maybe only after a rain, and sometimes in a continuous flow	
☐ **Stream:** typically wadeable during summer flows, including intermittent or ephemeral	
☐ **Water Conveyance Channel:** manmade, usually includes ditches and irrigation canals	
☐ **Wetland:** an ecosystem that depends on constant or recurrent shallow inundation or saturation at or near the soil surface and includes vegetation that grows directly in water or saturated soils.	

Water Section

W2. Do you have ponding, flooding and/or a seasonal high-water table that negatively affects the operation? If yes, indicate where on your property. ☐ Yes ☐ No

Description of issue and location - mark on map

W3. Do you have seeps? ☐ Yes ☐ No

If yes, are they treated or managed to meet your resource management and land use objectives? If not treated or managed, indicate where seeps are an issue on your property. ☐ Yes ☐ No

Description of issue and location - mark on map

W4. Do you have snow drifts? ☐ Yes ☐ No

If yes, do they cause damage to buildings or structures; interfere with livestock accessing food, water, or shelter; and/or interfere with access to essential agricultural operations? Indicate where snow drifts cause damage on your property. ☐ Yes ☐ No

Description of issue and location - mark on map

W5. Do you use surface water collected from precipitation runoff, ponds, lakes, surface watercourses, and reservoirs at an unsustainable rate (depletion)? ☐ Yes ☐ No

W6. Do you use groundwater at a rate greater than aquifer recharge resulting in depletion? ☐ Yes ☐ No

W7. Is naturally available moisture being managed to meet operational goals? ☐ Yes ☐ No

Water Section

W8. Do you have an irrigation system? If so, which of the following statements best describes how it is being managed and indicate on your property. ☐ Yes ☐ No

Management Method	Description of location - mark on map
☐ Irrigation water is being transported to, stored on, and applied to the field in a manner that controls a known volume, frequency, and rate of application.	
☐ Irrigation water isn't managed through irrigation water management techniques or fails to meet critical crop growth needs even when water is available.	
☐ The irrigation delivery system is inadequate to control the rate of flow through the system and to the field, the conveyance system (ditches, canals, reservoirs) has obvious leaks or soils that are naturally erosive, susceptible to excessive seepage, or both (e.g., sandy and gravelly soils).	
☐ The on-field irrigation method is uncontrolled flood or improvements to on-field application system will benefit natural resources.	

W9. Do you apply nitrogen or phosphorus (manure, organic, or inorganic nutrients)? Indicate which land use below and mark on a map. ☐ Yes ☐ No

- ☐ Associated Agricultural Land
- ☐ Crop
- ☐ Developed Land
- ☐ Farmstead
- ☐ Forest
- ☐ Other Rural Land
- ☐ Pasture

W10. Do you stockpile manure, biosolids, compost, or other soil amendments and pathogen sources? ☐ Yes ☐ No

If so, is it contained and fully functional? Indicate where on your property. ☐ Yes ☐ No

Description of location - mark on map

Water Section

W11. Do you store nutrients or waste materials such as milkhouse waste, feedstocks (grains, silage, etc.) and nonagricultural waste such as waste from processing livestock? If so, indicate where on your property.	☐ Yes ☐ No
Description of location - mark on map	

W12. Do you apply pesticides?	☐ Yes ☐ No
If so, are you following an Integrated Pest Management plan with scouting and economic thresholds?	☐ Yes ☐ No
Description of location - mark on map	

W13. Do livestock have direct uncontrolled access to surface water bodies including within confinement areas?	☐ Yes ☐ No

W14. Do you apply manure, biosolids or compost?	☐ Yes ☐ No
If so, are you following a nutrient management plan with appropriate vegetative buffers next to surface waters?	☐ Yes ☐ No
Description of location - mark on map	

W15. Does irrigation or rainfall transport salts to surface or groundwater?	☐ Yes ☐ No
If so, is it being managed through irrigation water management, tail water recovery, or a drainage system?	☐ Yes ☐ No

Water Section

W16. Do you store, mix or load petroleum products or agrichemical products?	☐ Yes ☐ No
If so, is there secondary containment in place? Indicate where on your property.	☐ Yes ☐ No
Description of location - mark on map	

W17. Are there heavy metals or other pollutants such as accumulation of industrial or mining waste in containment on your property?	☐ Yes ☐ No
If so, is adequate control or treatment in place? Indicate where on your property.	☐ Yes ☐ No
Description of location - mark on map	

Air Section

A1. Is there dust from confinement-based animal operations, unpaved roads, field operations, or windblown dust?	☐ Yes ☐ No
If so, are practices implemented to control dust? Indicate where on the property.	☐ Yes ☐ No
Description of practices and location - mark on map	

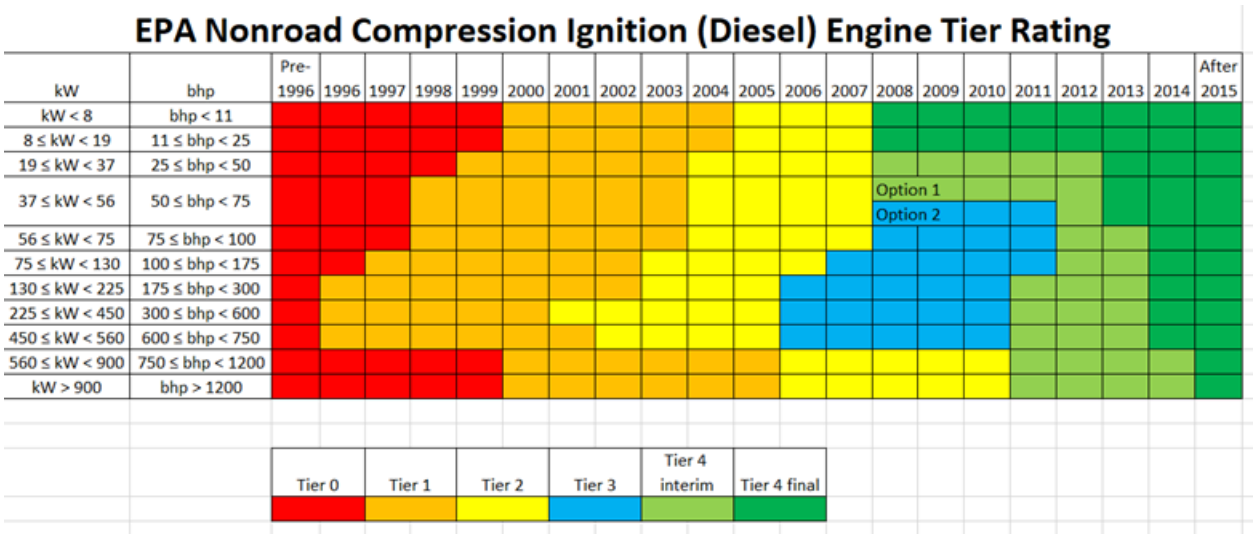
A2. Do you have diesel engine combustion sources greater than 25 brake hp? [If you do not know the brake horse power (bph) use horsepower (hp).] ☐ Yes ☐ No

If so, where do they fit into the categories below?

☐ **Low:** All diesel engines meet at least Tier 4 EPA Standards

☐ **Medium:** All diesel engines meet at least Tier 3 EPA Standards

☐ **High:** Not all diesel engines meet Tier 3 EPA Standards



Air Section

A3. Do you have non diesel engine combustion sources? If so, where do they fit into the categories below? ☐ Yes ☐ No

☐ **Low:** All non-diesel engine combustion sources utilize natural gas or propane as fuel. Additional emissions control for PM and NOx emissions are employed for all non-diesel engine combustion sources

☐ **Medium:**

For PM attainment areas: At minimum one of the following must be met:

- At least 50% of the normal annual fuel usage for non-diesel engine combustion sources in operation at the property is either natural gas or propane.
- At least 50% of the non-diesel engine combustion sources in operation at the property utilize emissions control for PM and NOx emissions.

For PM nonattainment areas (Polson, Ronan, Libby, and Lame Deer areas): At minimum one of the following must be met:

- At least 75% of the normal annual fuel usage for non-diesel engine combustion sources in operation at the PLU is either natural gas or propane.
- At least 75% of the non-diesel engine combustion sources in operation at the property utilize emissions control for PM and NOx emissions.

☐ **High:**

For PM attainment areas: Both of the following are true:

- Less than 50% of the normal annual fuel usage for non-diesel engine combustion sources in operation at the PLU is either natural gas or propane.
- Less than 50% of the non-diesel engine combustion sources in operation at the PLU utilize emissions control for PM and NOx emissions.

For PM nonattainment areas (Polson, Ronan, Libby, and Lame Deer areas): Both of the following are true:

- Less than 75% of the normal annual fuel usage for non-diesel engine combustion sources in operation at the PLU is either natural gas or propane.
- At least 75% of the non-diesel engine combustion sources in operation at the property utilize emissions control for PM and NOx emissions.

A4. Do you conduct prescribed burning or pile burning activities with basic smoke management practices in place? These practices include evaluation of smoke dispersion conditions, air quality impacts, record keeping, communication to those who the smoke might affect, emission reduction techniques. Indicate where on property. ☐ Yes ☐ No

Description of practices and location - mark on map

A5. Do you apply pesticides? ☐ Yes ☐ No

If so, do you implement practices to reduce volatilization such as only applying during low wind conditions, alternative formulations, or other VOC-reducing techniques? Indicate where on property. ☐ Yes ☐ No

Description of location - mark on map

Air Section

A6. Do you apply nitrogen fertilizer including manure, inorganic and organic fertilizers?	☐ Yes ☐ No
If so, is the application in accordance with a nutrient management plan, including annual soil testing and appropriate application rates? Indicate where on the property.	☐ Yes ☐ No
Description of location - mark on map	

A7. Is there any storage of manure from confined livestock? If so, what form is it in such as solid, solid with rain exclusion cover, liquid, or slurry?	☐ Yes ☐ No

A8. Is there odor from confined animal activities?	☐ Yes ☐ No
If so, are practices implemented to control the odor? Indicate where on the property.	☐ Yes ☐ No
Description of practices and location - mark on map	

A9. Do you follow a feed management plan or strategy of confined animals to manage nitrogen and/or methane emissions?	☐ Yes ☐ No

A10. Are carbon stocks on Associated Agricultural Land decreasing, stable, or increasing? Carbon stocks include dead plant material (plant and woody residue), living plant vegetation, and roots. Pick the description below that best matches.

Answer		Description
☐	None	No soil cover and/or excessive soil disturbance
☐	Low	Minimal soil cover and/or periodic disturbance
☐	Moderate	Moderate soil cover and/or periodic disturbance
☐	High	Majority of soil is covered or in perennial vegetation, with little soil disturbance
☐	Maximum	Perennial vegetative cover maintained and no soil disturbance

Plant Section

P1. Do you have a plant productivity and health concern on any of the following land uses? If so, do you have some concerns or is there a severe lack of plant productivity and health? Indicate where on the property. ☐ Yes ☐ No

Land Use	Some concerns	Severe lack of plant productivity and health	Description of issue and location - mark on map
Crop	☐	☐	
Forest	☐	☐	
Pasture/ Range	☐	☐	
Associated Ag Land/ Farmstead/ Other Rural Land	☐	☐	

P2. Do you have excessive woody or other organic material (biomass) on land uses **other than forestland**? ☐ Yes ☐ No

If so, is the biomass managed to reduce wildfire risk? Indicate where on the property. ☐ Yes ☐ No

Description of location - mark on map

Animal Section: Terrestrial Habitat for Wildlife and Invertebrates

Crop Land Use

AN1. What estimated percent residue cover is left on your cropland? For reference, a field with 100% flat residue cover has no soil surface visible. A field with 50% flat surface residue has half of the soil surface visible.	_____ %
For what months does it remain in place?	


70% residue cover


50% residue cover


30% residue cover


10% residue cover

AN2. What type of tillage management is implemented?

- ☐ No-till (single- or double-disc drill with no other tillage)
- ☐ Mulch till (hoe drill, minimum full-width tillage, strip-till)
- ☐ Conventional tillage

AN3. What is the estimated percent of your cropland that is uncultivated	_____ %
AN4. What estimated percent of the un-cultivated cropland is in winter cover such as trees, brush, windbreaks/shelterbelts, cattails/bulrushes?	_____ %
AN5. What estimated percent of the un-cultivated cropland is in nesting cover such as tall grass, grass/legume mixtures, brush/grass?	_____ %

AN6. How is herbaceous vegetation managed (non-woody)?

- ☐ Specifically managed for wildlife nesting/brood/roosting cover (management activities such as grazing, burning, haying are conducted outside primary nesting season)
- ☐ In a long-term set-aside program
- ☐ Grazed/burned/hayed occasionally (1 of 5 years maximum) and after July 15
- ☐ Hay cut after July 15 and before August 10, or grazed after June 1; minimum of 10 inches of standing herbaceous cover over winter
- ☐ Hay cut after July 1 but before August 10, or grazed after June 1; minimum of 7 inches of standing herbaceous cover over winter
- ☐ Hay cut only once per year before July 1 or grazing after June 1; minimum of 4 inches of standing herbaceous cover over winter
- ☐ Two or more annual hay cuttings (first cutting in June) or grazing before May 1

AN7. What is the average distance from the center of fields to permanent cover (3 or more acres) such as trees/brush, un-disturbed herbaceous vegetation, wetland?	_____

Animal Section: Terrestrial Habitat for Wildlife and Invertebrates

Crop Land Use

AN8. What is the condition of wetland habitat?
☐ No modification to wetland
☐ Minor modification to wetland hydrology but primary functions still present (for example, vegetation alterations such as removal of woody vegetation or light grazing)
☐ Moderate modification to wetland hydrology; hydrological functions are impaired and not fully functional (for example, negative impacts from farming operations or substantial grazing)
☐ Significant modification to wetland hydrology (for example, wetland fill, drainage ditches, stock water pits, drain tile, pumping activities)
☐ No wetlands present

AN9. What is the condition of wetland vegetation?
☐ Native wetland vegetation predominates
☐ Native wetland vegetation predominates but with some invasion of non-native species
☐ Non-native plant species predominate?
☐ The following noxious weeds are present and not actively being controlled: purple loosestrife, common tansy, Eurasian milfoil, flowering rush, curlyleaf pondweed, salt cedar
☐ No wetlands present

AN10. How is wetland habitat managed?
☐ Managed for wildlife
☐ Light grazing or occasional (one of five years) haying but not cultivated
☐ Moderate grazing (vegetative buffer present on at least half of shoreline) or frequent cultivation or haying
☐ Heavy grazing or cultivation throughout the growing season
☐ No wetlands present

AN11. What plant community components does the riparian habitat include?
☐ Grass/forb
☐ Low shrub (<8 feet tall)
☐ Tall shrub (>8 feet tall)
☐ Tree
☐ No riparian habitat present

Animal Section: Terrestrial Habitat for Wildlife and Invertebrates

Crop Land Use

AN12. What is the condition of stream habitat?
☐ No channel/streambank modification such as channelization, riprap; banks well vegetated with native species; no downcutting, channel widening, or excessive sediment deposition
☐ No channel/streambank modification; native vegetation dominates; banks with minimal erosion or sediment deposition
☐ No channel/streambank modification; introduced plants common; moderate bank erosion, downcutting, or sediment deposition
☐ Channel/streambank modification such as channelization and/or riprap on greater than 20% of the stream reach; or excessive bank erosion, downcutting, or sediment deposition
☐ No streams present

AN13. What is the condition of artificial stock ponds and/or reservoirs?
☐ Managed for wildlife (stock water piped away or use of water gap) and/or the shoreline is protected
☐ Shoreline only occasionally used by livestock or pond is managed under a rotational grazing system that does not allow deterioration of shoreline vegetation.
☐ Vegetative buffer present on half of the shoreline; remainder of the shoreline vegetation is adversely affected by grazing, cultivation, etc.
☐ Vegetative buffer present on less than half of the shoreline
☐ Shoreline trampled and vegetation removed (bare ground) from intense livestock use or other disturbances
☐ No artificial stock ponds or reservoirs present

AN14. What is the condition of woody draws?
☐ Diverse age and size classes of trees and shrubs; herbaceous understory is at least 50% native species and includes grasses and forbs
☐ Tree and shrub layers missing younger age classes to a small degree; herbaceous understory consists of less than 50% native species but includes both grasses and forbs
☐ Tree and shrub layers missing younger and middle age classes to a moderate to significant degree; herbaceous understory consists of less than 25% native species; forb component is generally lacking
☐ Open stand of trees with little to no age and size class diversity; shrub layer is reduced to absent; herbaceous understory is dominated by introduced grasses (e.g., smooth brome, quackgrass, Kentucky bluegrass)
☐ No woody draws present

Animal Section: Terrestrial Habitat for Wildlife and Invertebrates

Pasture Land Use

AN15. What estimated percent of your pastureland is un-cultivated?	_____ %
AN16. What estimated percent of your pastureland is in winter cover such as trees, brush, shelterbelts, cattails/bulrushes?	_____ %
AN17. What estimated percent of your pastureland is in nesting cover such as tall grass, grass/legume mixtures, brush/grass?	_____ %

AN18. How is herbaceous vegetation managed?

- ☐ Specifically managed for wildlife nesting/brood/roosting cover (management activities such as grazing, burning are conducted outside primary nesting season and are only used as tools to restore plant vigor and are generally excluded
- ☐ In a long-term set-aside program
- ☐ Grazed/burned/hayed occasionally (1 of 5 years maximum) and after July 15
- ☐ Grazed after June 1; minimum of 10 inches of standing herbaceous cover over winter
- ☐ Grazed after June 1; minimum of 7 inches of standing herbaceous cover over winter
- ☐ Grazed after June 1; minimum of 4 inches of standing herbaceous cover over winter
- ☐ Grazed before May 1

AN19. What is the average distance from the center of fields to permanent cover (3 or more acres) such as trees/brush, un-disturbed herbaceous vegetation, wetland?	_____

AN20. What is the condition of wetland habitat?

- ☐ No modification to wetland hydrology
- ☐ Minor modification to wetland hydrology but primary functions still present (for example, vegetation alterations such as removal of woody vegetation or light grazing)
- ☐ Moderate modification to wetland hydrology; hydrological functions are impaired and not fully functional (for example, negative impacts from farming operations or substantial grazing)
- ☐ Significant modification to wetland hydrology (for example, wetland fill, drainage ditches, stock water pits, drain tile, pumping activities)
- ☐ No wetlands present

AN21. What is the condition of wetland vegetation?

- ☐ Native wetland vegetation predominates
- ☐ Native wetland vegetation predominates but with some invasion of non-native species
- ☐ Non-native plant species predominate
- ☐ The following noxious weeds are present and not actively being controlled: purple loosestrife, common tansy, Eurasian milfoil, flowering rush, curlyleaf pondweed, salt cedar
- ☐ No wetlands present

Animal Section: Terrestrial Habitat for Wildlife and Invertebrates

Pasture Land Use

AN22. How is wetland habitat managed?
☐ Managed for wildlife
☐ Light grazing (occasional livestock use or rotational grazing system that does not allow deterioration of wetland vegetation) or occasional (one of five years) haying but not cultivated
☐ Moderate grazing (vegetative buffer present on at least half of shoreline) or frequent cultivation or haying
☐ Heavy grazing or cultivation throughout the growing season
☐ No wetlands present

AN23. What plant community components does the riparian habitat include?
☐ Grass/forb
☐ Low shrub (<8 feet tall)
☐ Tall shrub (>8 feet tall)
☐ Tree
☐ No riparian habitat present

AN24. What is the condition of stream habitat?
☐ No channel/streambank modification such as channelization, riprap; banks well vegetated with native species; no downcutting, channel widening, or excessive sediment deposition
☐ No channel/streambank modification; native vegetation dominates; banks with minimal erosion or sediment deposition
☐ No channel/streambank modification; introduced plants common; moderate bank erosion, downcutting, or sediment deposition
☐ Channel/streambank modification such as channelization and/or riprap on greater than 20% of the stream reach; or excessive bank erosion, downcutting, or sediment deposition
☐ No streams present

AN25. What is the condition of artificial stock ponds and/or reservoirs?
☐ Managed for wildlife (stock water piped away or use of water gap) and/or the shoreline is protected
☐ Shoreline only occasionally used by livestock or pond is managed under a rotational grazing system that does not allow deterioration of shoreline
☐ Vegetative buffer present on half of the shoreline; remainder of the shoreline vegetation is adversely affected by grazing, cultivation, etc.
☐ Vegetative buffer present on less than half of shoreline
☐ Shoreline trampled and vegetation removed (bare ground) from intense livestock use or other disturbances
☐ No artificial stock ponds or reservoirs present

AN26. What is the condition of woody draws?
☐ Diverse age and size classes of trees and shrubs; herbaceous understory is at least 50% native species and includes grasses and forbs
☐ Tree and shrub layers missing younger age classes to a small degree; herbaceous understory consists of less than 50% native species but includes both grasses and forbs
☐ Tree and shrub layers missing younger and middle age classes to a moderate to significant degree; herbaceous understory consists of less than 25% native species; forb component is generally lacking
☐ Open stand of trees with little to no age and size class diversity; shrub layer is reduced to absent; herbaceous understory is dominated by introduced grasses (e.g., smooth brome, quackgrass, Kentucky bluegrass)
☐ No woody draws present

Animal Section: Terrestrial Habitat for Wildlife and Invertebrates

Range Land Use

AN27. Does production of native rangeland plant species appear low, moderate, or appropriate compared to normal production for the site?	_____

AN28. How is grazing managed on your rangeland?

- ☐ Specifically managed to enhance wildlife habitat by providing residual herbaceous cover fall through spring
- ☐ Stocking rates and grazing periods are managed to remove forage in accordance with site production limitations, rate of plant growth, and physiological needs of forage plants; desired grazed plants are provided sufficient recovery time from grazing; adequate vegetative cover is maintained on sensitive areas (riparian, wetland, etc.) (for example, grazing system meets NRCS Prescribed Grazing (528) practice standard and specifications)
- ☐ Moderate, season-long grazing or no planned grazing system or no grazing on unit
- ☐ Heavy to excessive grazing with or without a planned grazing system

AN29. What plant community components does the riparian habitat include?

- ☐ Grass/forb
- ☐ Low shrub (<8 feet tall)
- ☐ Tall shrub (>8 feet tall)
- ☐ Tree
- ☐ No riparian habitat present

AN30. What is the condition of stream habitat?

- ☐ No channel/streambank modification such as channelization, riprap; banks well vegetated with native species; no downcutting, channel widening, or excessive sediment deposition
- ☐ No channel/streambank modification; native vegetation dominates; banks with minimal erosion or sediment deposition
- ☐ No channel/streambank modification; introduced plants common; moderate bank erosion, downcutting, or sediment deposition
- ☐ Channel/streambank modification such as channelization and/or riprap on greater than 20% of the stream reach; or excessive bank erosion, downcutting, or sediment deposition
- ☐ No streams present

AN31. What is the condition of wetland habitat?

- ☐ No modification to wetland hydrology
- ☐ Minor modification to wetland hydrology but primary functions still present (for example, vegetation alterations such as removal of woody vegetation or light grazing)
- ☐ Moderate modification to wetland hydrology; hydrological functions are impaired and not fully functional (for example, negative impacts from farming operations or substantial grazing)
- ☐ Significant modification to wetland hydrology (for example, wetland fill, drainage ditches, stock water pits, drain tile, pumping activities)
- ☐ No wetlands present

Animal Section: Terrestrial Habitat for Wildlife and Invertebrates

Range Land Use

AN32. What is the condition of wetland vegetation?

- ☐ Native wetland vegetation predominate
- ☐ Native wetland vegetation predominate but with some invasion of non-native species
- ☐ Non-native plant species predominate
- ☐ The following noxious weeds are present and not actively being controlled: purple loosestrife, common tansy, Eurasian milfoil, flowering rush, curlyleaf pondweed, salt cedar
- ☐ No wetlands present

AN33. How is wetland habitat managed?

- ☐ Managed for wildlife
- ☐ Light grazing (occasional livestock use or rotational grazing system that does not allow deterioration of wetland vegetation) or occasional (one of five years) haying but not cultivated
- ☐ Moderate grazing (vegetative buffer present on at least half of shoreline) or frequent cultivation or haying
- ☐ Heavy grazing or cultivation throughout the growing season
- ☐ No wetlands present

AN34. What is the condition of artificial stock ponds and/or reservoirs?

- ☐ Managed for wildlife (stock water piped away or use of water gap) and/or the shoreline is protected
- ☐ Shoreline only occasionally used by livestock or pond is managed under a rotational grazing system that does not allow deterioration of shoreline vegetation
- ☐ Vegetative buffer present on half of the shoreline; remainder of the shoreline vegetation is adversely affected by grazing, cultivation, etc.
- ☐ Vegetative buffer present on less than half of the shoreline
- ☐ Shoreline trampled and vegetation removed (bare ground) from intense livestock use of other disturbances
- ☐ No artificial stock ponds or reservoirs present

AN35. What is the condition of woody draws?

- ☐ Diverse age and size classes of trees and shrubs; herbaceous understory is at least 50% native species and includes grasses and forbs
- ☐ Tree and shrub layers missing younger age classes to a small degree; herbaceous understory consists of less than 50% native species but includes both grasses and forbs
- ☐ Tree and shrub layers missing younger and middle age classes to a moderate to significant degree; herbaceous understory consists of less than 25% native species; forb component is generally lacking
- ☐ Open stand of trees with little to no age and size class diversity; shrub layer is reduced or absent; herbaceous understory is dominated by introduced grasses (e.g., smooth brome, quackgrass, Kentucky bluegrass)
- ☐ No woody draws present

Animal Section: Terrestrial Habitat for Wildlife and Invertebrates

Forest Land Use

AN36. What is the composition of your forestland?

- ☐ >4 tree species with diverse understory vegetation; numerous forest openings ≤500 feet across; managed to provide large old trees
- ☐ 3-4 tree species with abundant understory; occasional forest openings not more than 500 feet across
- ☐ 1-2 tree species; even-aged stands; understory vegetation scarce; no or few forest openings, or openings greater than 500 feet across

AN37. On average, how many snags per acre are on your forestland and what size are they (>10 inches diameter breast height, 4-10 inches diameter breast height)? _____

AN38. On average, how many down logs/acre >10 inches diameter breast height are on your forestland? _____

AN39. What plant community components does the riparian habitat include?

- ☐ Grass/forb
- ☐ Low shrub (<8 feet tall)
- ☐ Tall shrub (>8 feet tall)
- ☐ Tree
- ☐ No riparian habitat present

AN40. What is the condition of stream habitat?

- ☐ No channel/streambank modification such as channelization, riprap; banks well vegetated with native species; no downcutting, channel widening, or excessive sediment deposition
- ☐ No channel/streambank modification; native vegetation dominates; banks with minimal erosion or sediment deposition
- ☐ No channel/streambank modification; introduced plants common; moderate bank erosion, downcutting, or sediment deposition
- ☐ Channel/streambank modification such as channelization and/or riprap on greater than 20% of the stream reach; or excessive bank erosion, downcutting, or sediment deposition
- ☐ No streams present

AN41. What is the condition of wetland habitat?

- ☐ No modification to wetland hydrology
- ☐ Minor modification to wetland hydrology but primary functions still present (for example, vegetation alterations such as removal of woody vegetation or light grazing)
- ☐ Moderate modification to wetland hydrology; hydrological functions are impaired and not fully functional (for example, negative impacts from farming operations or substantial grazing)
- ☐ Significant modification to wetland hydrology (for example, wetland fill, drainage ditches, stock water pits, drain tile, pumping activities)
- ☐ No wetlands present

Animal Section: Terrestrial Habitat for Wildlife and Invertebrates

Forest Land Use

AN42. What is the condition of wetland vegetation?
☐ Native wetland vegetation predominates
☐ Native wetland vegetation predominates but with some invasion of non-native species
☐ Non-native plant species predominate
☐ The following noxious weeds are present and not actively being controlled: purple loosestrife, common tansy, Eurasian milfoil, flowering rush, curlyleaf pondweed, salt cedar
☐ No wetlands present

AN43. How is wetland habitat managed?
☐ Managed for wildlife
☐ Light grazing (occasional use or a rotational grazing system that does not allow deterioration of wetland vegetation) or occasional (one of five years) haying but not cultivated
☐ Moderate grazing (vegetative buffer present on at least half of shoreline) or frequent cultivation or haying
☐ Heavy grazing or cultivation throughout the growing season
☐ No wetlands present

AN44. What is the condition of woody draws?
☐ Diverse age and size classes of trees and shrubs; herbaceous understory is at least 50% native species and includes grasses and forbs
☐ Tree and shrub layers missing younger age classes to a small degree; herbaceous understory consists of less than 50% native species but includes both grasses and forbs
☐ Tree and shrub layers missing younger and middle age classes to a moderate to significant degree; herbaceous understory consists of less than 25% native species; forb component is generally lacking
☐ Open stand of trees with little to no age and size class diversity; shrub layer is reduced to absent; herbaceous layer is dominated by introduced grasses (e.g., smooth brome, quackgrass, Kentucky bluegrass)
☐ No woody draws present

Animal Section: Terrestrial Habitat for Wildlife and Invertebrates

Pollinator Habitat (All Land Uses)

AN45. What percent of the vegetative cover on the assessment area is native or non-native flowering plants (do not count invasive or noxious plant species such as knapweeds, Canada thistle, oxeye daisy, etc.)? Enter your visual estimate.	_____ %
AN46. How many species of spring-blooming (April-June) native or non-native flowering plants (do not count invasive or noxious plant species) are on the assessment area? Enter your visual estimate.	_____
AN47. How many species of summer-blooming (July-August) native or non-native flowering plants (do not count invasive or noxious plant species) are on the assessment area? Enter your visual estimate.	_____
AN48. How many species late-blooming (September-October) native or non-native flowering plants (do not count invasive or noxious plant species) are on the assessment area? Enter your visual estimate.	_____
AN49. What is the percent cover of shrubs/woody plant species with hollow/pithy stems (elderberry, ninebark) and/or large sturdy forbs with hollow/pithy stems (asters, goldenrod, fireweed) on the assessment area? Enter your visual estimate.	_____ %
AN50. What is the percent cover of bunchgrasses on the assessment area? Enter your visual estimate.	_____ %
AN51. For landscape scale habitat (rangelands, grasslands, pastures), is mowing and/or burning applied to <1/3 or >1/3 of the assessment area each year? For small-scale habitat (target areas such as pivot corners, small fields, crop field borders, demonstration gardens, etc.), is ground-disturbing activity applied to <1/2 or >1/2 of the assessment area each year?	☐ Yes ☐ No
AN52. What is the estimated distance from the assessment area to any area treated with insecticides or insecticide treated seed?	_____
If the assessment area is <100 feet away, are any measures implemented to prevent or mitigate insecticide risks? Describe mitigation measures implemented.	☐ Yes ☐ No
AN53. What is the estimated distance from the assessment area to any area treated with herbicides?	_____
AN54. If herbicides are used within 100 feet of the assessment area, are the herbicides applied in a way that minimizes drift (boom sprayer low to the ground or spot applied)?	☐ Yes ☐ No
If no, are the herbicides selective herbicides that do not affect pollinator plants or are the herbicides non-selective or broad-spectrum herbicides? ☐ Selective herbicides ☐ Non-selective or broad-spectrum herbicides	

Animal Section: Aquatic Habitat for Fish and Other Organisms

Aquatic Habitat (All Land Uses)

AN55. What is the condition of the stream channel?

- ☐ No signs of incision (such as vertical banks) or aggradation (very shallow multiple channels); channel and floodplain are connected
- ☐ Minimal bank erosion; channel and floodplain connected in most areas; possibly a few shallow places in stream due to sediment deposits
- ☐ Active incision evident; plants along channel are stressed or dying; channel appears to be disconnected from floodplain; streambank failures evident; moderate bank erosion; deposition of sediment causing channel to be very shallow in places
- ☐ Active incision (headcut); vegetation very sparse; channel disconnected from floodplain; streambank failures prominent; severe bank erosion

AN56. Has the hydrology of the stream been altered?

- ☐ No alteration: bankfull or higher flows generally every 1 to 2 years; no dams, dikes, or development in the flooplain and no water control structures
- ☐ Bankfull or higher flows once every 3 to 5 years; developments in the floodplain, stream water withdrawals, flow augmentation, or water control structures may be present but do not significantly alter natural flow
- ☐ Bankfull or higher flows once every 6 to 10 years; developments in the floodplain, stream water withdrawals, flow augmentation, or water control structures alter natural flow
- ☐ Bankfull or higher flows rarely occur; stream water withdrawals completely dewater the channel and/or flow augmentation severely alters natural flow

AN57. What is the condition of the streambanks?

- ☐ Banks are stable and protected by plant roots, wood, and rock; no fabricated structures on banks; no excessive erosion or bank failures; no recreational or livestock access
- ☐ Banks are moderately stable and protected by roots, wood, or rock; limited number of structures on banks; evidence of erosion or bank failures; recreational and/or livestock use do not negatively impact bank condition
- ☐ Banks are moderately unstable; little protection of banks by plant roots, wood, or rock; numerous fabricated structures on banks; excessive bank erosion or active bank failures; recreational and/or livestock use are contributing to bank instability
- ☐ Banks are unstable; no bank protection with roots, wood, or rock; riprap and/or other structures dominate banks; numerous active bank failures; recreational and/or livestock use are contributing to bank instability

AN58. How much riparian vegetation is present along the stream channel?

- ☐ Plant community extends at least two channel widths and is generally continuous along the stream
- ☐ Plant community extends at least one channel width and is generally continuous along the stream; vegetation gaps do not exceed 10% of the length of the stream
- ☐ Plant community extends at least 1/2 of the channel width; vegetation gaps do not exceed 30% of the length of the stream
- ☐ Plant community extends at least 1/3 of the channel width; vegetation gaps exceed 30% of the length of the stream
- ☐ Plant community extends <1/3 of the channel width; vegetation gaps exceed 30% of the length of the stream

Animal Section: Aquatic Habitat for Fish and Other Organisms

Aquatic Habitat (All Land Uses)

AN59. What is the quality of the riparian vegetation along the stream channel?
☐ Natural and diverse riparian vegetation; no invasive species
☐ Natural and diverse riparian vegetation; invasive species present in small numbers
☐ Natural vegetation compromised with invasive species common
☐ Little or no natural vegetation; invasive species widespread

AN60. What estimated percent of the water surface along the length of the stream is shaded?	_____ %

AN61. Do nutrients (such as phosphorous or nitrogen) impact the stream?
☐ Clear water; little algal growth present
☐ Fairly clear or slightly greenish water; moderate algal growth on substrates
☐ Greenish water particularly in slow sections; abundant algal growth especially in warmer months
☐ Pea green color present; thick algal mats dominating stream

AN62. Does manure impact the stream?
☐ Livestock do not have access to stream
☐ Livestock access is controlled and/or limited to small watering or crossing areas
☐ Livestock have unlimited access to stream during part of the year
☐ Livestock have unlimited access to stream during entire year

AN63. Are there barriers to the movement of aquatic species?
☐ No artificial barriers that prohibit movement during any time of the year
☐ Physical structures and/or water withdrawals restrict movement seasonally
☐ Physical structures and/or water withdrawals restrict movement throughout the year
☐ Physical structures and/or water withdrawals prohibit movement

Animal Section: Aquatic Habitat for Fish and Other Organisms

Aquatic Habitat (All Land Uses)

AN64. Which of the following features of fish and aquatic invertebrate habitat are present in the stream?

- ☐ Logs/large wood
- ☐ Small wood accumulations
- ☐ Large boulders
- ☐ Small boulder clusters
- ☐ Cobble within riffles
- ☐ Boulders within riffles
- ☐ Fine woody debris (accumulations of twigs, branches, leaves, and roots)
- ☐ Overhanging vegetation
- ☐ Aquatic vegetation
- ☐ Undercut banks (water-scoured areas under the surface of the bank)
- ☐ Deep pools (areas of slow water deep enough to provide protective cover for fish)
- ☐ Root mats (generally from trees but sometimes from mature dense shrubs at or beneath the water surface)
- ☐ Off-channel habitats (side channels, floodplain wetlands, backwaters)

AN65. Is gravel or cobble substrate in riffles covered by sediment? Estimate which option best fits.

- ☐ Gravel or cobble substrates are <10% embedded
- ☐ Gravel or cobble substrates are 10-20% embedded
- ☐ Gravel or cobble substrates are 21-30% embedded
- ☐ Gravel or cobble substrates are 31-40% embedded
- ☐ Gravel or cobble substrates are >40% embedded
- ☐ Not applicable (riffles or swift flowing water and coarse substrates are not present)

AN66. Is stream habitat affected by elevated salinity levels caused by people? Indicate which option best fits.

- ☐ No wilting, bleaching, leaf burn, or stunting of riparian vegetation; no streamside salt-tolerant vegetation present
- ☐ Minimal wilting, bleaching, leaf burn, or stunting of riparian vegetation; some salt-tolerant streamside vegetation
- ☐ Riparian vegetation may show significant wilting, bleaching, leaf burn, or stunting; dominance of salt-tolerant streamside vegetation
- ☐ Severe wilting, bleaching, leaf burn, or stunting; most streamside vegetation is salt tolerant
- ☐ Not applicable (observed impacts of salt are a product of natural weathering processes uninfluenced by humans)

Energy Section

E1. Do you have a current energy audit or results from an NRCS Energy Estimator?	☐ Yes ☐ No ☐ N/A
If so, does the energy audit or energy estimator, or field observation indicate a benefit from energy implementing energy improvements?	☐ Yes ☐ No ☐ N/A

Livestock Section

L1. What are your primary livestock species? Examples include cattle, sheep, honeybees, aquacultured fish and others.

L2. Indicate your animal numbers below:

Species and Class	Numbers

L3. For each condition below, indicate which land uses your livestock graze. Check all that apply.

Condition	Grazed Crop	Farmstead	Grazed Forest	Pasture	Range
1. Livestock have adequate nutrition and forage available and there is adequate plant residue on the soil surface to prevent erosion.	☐	☐	☐	☐	☐
2. Livestock have adequate forage available but plant residues on the soil surface are lacking and could lead to, or is causing, an erosion problem.	☐	☐	☐	☐	☐
3. Livestock do not have adequate forage available.	☐	☐	☐	☐	☐

L4. Do livestock have adequate shelter? ☐ Yes ☐ No

If not, are the livestock adapted to local climate or at risk for stress or death?

☐ Adapted
☐ At risk

L5. Do your terrestrial or aquacultured livestock have adequate quantity, quality, and distribution of water? ☐ Yes ☐ No

If not, indicate which categories are lacking:

☐ Quantity
☐ Quality
☐ Distribution

Livestock Section

L6. Is a prescribed grazing plan followed? Briefly describe your grazing rotation or make notes on maps showing when fields/pastures are grazed and by how many and what type of livestock.	☐ Yes ☐ No

Crop Section

Please list each crop rotation on your operation and mark its location on a map. If desired, describe each crop rotation.

Rotation 1: _____

Rotation 2: _____

Rotation 3: _____

C1. What is the main crop type grown in the majority (>50%) of crop years for each rotation? If more than one answer for different crop rotations, select the appropriate boxes.

Crop Type	Crop Rotation 1	Crop Rotation 2	Crop Rotation 3
a. Not listed, or fallow	☐	☐	☐
b. Orchard, vineyard, berries, and nuts	☐	☐	☐
c. Vegetable Crops	☐	☐	☐
d. Seed Crops, *For example: certified or foundation seed.*	☐	☐	☐
e. Turfgrass for Sod and Nursery Crops	☐	☐	☐
f. Close Grown Crops – Residue Not Harvested *For example: annual Crops with less than 15" spacing between rows (small grains, annual legumes, etc.) and adequate high carbon residue left on the field after harvest.*	☐	☐	☐
g. Close Grown Crops – Residue Removed *For example: annual Crops with less than 15" spacing between rows (small grains, annual legumes, etc.) and high carbon residue is removed either through baling of straw, haying of green vegetation, or overgrazing.*	☐	☐	☐
h. Row Crops – Durable Residue Not Harvested *For example: annual Crops planted with 15" or greater spacing between rows (corn, beets, potatoes) and adequate high carbon residue is left on the field (barley straw is not baled, adequate corn stover remains after grain corn harvest, etc.)*	☐	☐	☐
i. Row Crops – Residue Removed or Fragile *For example: annual Crops planted with 15" or greater spacing between rows (corn, beets, potatoes) and inadequate high carbon residue is left on the field (corn is harvested for silage, barley straw is baled after harvest, etc.)*	☐	☐	☐
j. Christmas Trees	☐	☐	☐
k. Hay Crops – Forage *For example: alfalfa, hay barley, winter wheat hay*	☐	☐	☐

Crop Section

C2. What is the productivity of the crops in the majority (>50%) of crop years for each rotation?			
Productivity	**Crop Rotation 1**	**Crop Rotation 2**	**Crop Rotation 3**
1. High - Greater than the county or field average	☐	☐	☐
2. Good - Equal to the county or field average	☐	☐	☐
3. Fair - Slightly less than the county or field average	☐	☐	☐
4. Low - Moderately less than the county or field average	☐	☐	☐
5. Poor - Significantly less than the county or field average	☐	☐	☐

C3. How much high carbon residue is present on the soil surface to protect against wind erosion? If more than one answer for different crop rotations, select the appropriate boxes.

Existing Organic Matter and Carbon Stock Condition *(Each bullet point is a stand-alone example. Not all description points need to be met.)*		**Crop Rotation 1**	**Crop Rotation 2**	**Crop Rotation 3**
None	**Rapidly Depleting Soil Organic Matter** • Visible signs of wind erosion, including sediment in road ditches and on fence lines. • No soil cover and/or excessive soil disturbance • Fallow and/or low residue crops (annual legumes, brassicas, corn silage, annual hay, etc.) for >50% of the annual portion of the rotation. • Any crop rotations with beets or potatoes • Multiple full-width tillage passes	☐	☐	☐
Low	**Depleting Soil Organic Matter** • Partial soil cover and/or periodic tillage • Partial width or limited full-width tillage • < 50% high residue crops (small grains, grain corn) in the annual portion of the rotation. • Use of a hoe-drill if small grain is harvested <12” tall and/ or residue is removed from the field in any manner (baling, burning, grazing).	☐	☐	☐
Moderate	**Maintaining Soil Organic Matter** • May include cover crops, but not required. • ≥ 50% of the annual portion of the rotation is in high residue crops • No full-width tillage or tillage passes minimize soil disturbance • Use of single- or double-disc drill. • Use of a hoe-drill if small grain residue is cut ≥12” at harvest and not removed from the field.	☐	☐	☐
High	**Building Soil Organic Matter** • Year-round soil cover and no tillage with a single- or double-disc drill, • ≥ 50% of the annual portion of the rotation is in high residue crops • Includes cover crops or perennial crops (including hay and green manures) with full ground cover • No overgrazing of vegetation • No baling or burning of crop residues	☐	☐	☐
Maximum	Perennial vegetative cover maintained, and no soil disturbance activities conducted	☐	☐	☐

Crop Section

C4. Indicate any causes of observed plant pest pressure. Indicate location of problem on map or describe here.			
Cause	**Crop Rotation 1**	**Crop Rotation 2**	**Crop Rotation 3**
a. Invasive species (Noxious weeds or shrubs, including; cheat grass, Canada Thistle, Spotted Knapweed, Leafy Spurge, Palmer Amaranth, Russian Olive, and more)			
1) Invasive species are present but are not affecting desired plant community, yields, and producer goals.	☐	☐	☐
2) Invasive species outcompete the crop or decrease the quality of forage. Desired yields and producer goals are not met.	☐	☐	☐
b. Undesirable plants, insects, diseases, animals, pathogens, and nematodes			
1) Plant pressure is not occurring or is managed so the presence is below the economic threshold. There is no scouting or PAMS/IPM techniques implemented.	☐	☐	☐
2) Presence of pests are being scouted and monitored and/or PAMS/IPM techniques are implemented to keep pests within tolerable limits. A combination of treatment methods with regards to environmental impacts are employes when economic thresholds are met. Desired yields and producer goals are met, and potential environmental impacts are mitigated.	☐	☐	☐
3) Presence of pests are being scouted and monitored and/or PAMS/IPM techniques are implemented to keep pests within tolerable limits. A single treatment method is employed when thresholds are met. Desired yields and client goals are met.	☐	☐	☐
4) Pests are present and plant/crop damage is occurring throughout the stand. Desired yields and producer goals and not being met due to pest pressure.	☐	☐	☐
c. Chemically resistant weeds.			
Chemical forms and modes of action are rotated and number of applications per growing season is limited to prevent and alleviate pesticide resistance. Crops are rotated and pest resistant varieties are planted. No to little presence of chemically resistant weeds.	☐	☐	☐
Chemical forms and modes of action are rotated and number of applications per growing season are limited to prevent and alleviate pesticide resistance. Little to moderate presence of chemically resistant weeds.	☐	☐	☐
A single chemical form is used and applied multiple times per season to treat identified pests. Moderate to severe presence of chemically resistant weeds.	☐	☐	☐

Crop Section

C5. Do you apply nitrogen or phosphorus (manure, organic, or inorganic nutrients)? Indicate which crop rotations receive these nutrients. Indicate type of fertilizer, application method, and approximate time of application. ☐ Yes ☐ No

Type of fertilizer, application method, and approximate time of application.	Crop Rotation 1	Crop Rotation 2	Crop Rotation 3
Broadcast urea and KCl in the fall. P starter fertilizer through the drill in the spring.	☒	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

Pasture Section

Please list each pasture unit (field number or name) on your operation and mark its location on a map.

PA1. Are any of your pasture land units composed primarily of warm season grasses?	
Field # / Name	**Yes/No**

PA2. What estimated percentage of each pasture unit is desirable species?	
Field # / Name	**Percent Desirable Species**

PA3. During the height of the growing season, what estimated percentage of each pasture unit includes live (non-dormant) leaf canopy cover?	
Field # / Name	**Percent Live Canopy Cover**

Pasture Section

PA4. The below options relate to the biotic function of the pasture unit. Indicate which option best fits each pasture unit.

1. No plant recovery after grazing/harvest. Pale, yellow or brown, or severe stunting of desirable species.
2. Some recovery. Yellowish green forage, or moderate or slight stunting of desirable forage.
3. Adequate recovery of desirable forage. Yellowish and dark green areas due to manure and urine patches.
4. Good recovery of desirable forage. Light green and dark green forage present.
5. Rapid recovery of desirable forage. All healthy green forage.

Field # / Name	No Recovery	Some Recovery	Adequate Recovery	Good Recovery	Rapid Recovery
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

PA5. Do you apply nitrogen or phosphorus (manure, organic, or inorganic nutrients)? Indicate which pastures receive these nutrients. Indicate type of fertilizer, application method, and approximate time of application. ☐ Yes ☐ No

Field # / Name	Describe fertilizer type, application method, and approximate time of application.

PA6. Pick the description below that best matches your field characteristics for each pasture unit:

High - Plant density high, no runoff, good infiltration. No evidence of present or past erosion.

Good - Plant density high, runoff low, good infiltration. May have evidence of past erosion if present.

Fair - Plant density good and runoff moderate. If present, erosion concentrated on heavily used areas.

Low - Plant density slows runoff. Erosion present and easily seen on steeper terrain.

Poor - Plant density is insufficient to stop runoff and poor infiltration. Erosion easily visible throughout pasture.

Field # / Name	High	Good	Fair	Low	Poor
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

Pasture Section

PA7. In relation to soil compaction and soil regenerative features, pick the description below that best matches each pasture unit.

High – no dense or platy layers, crumbly soil throughout, abundant root growth, surface horizon dramatically darker than subsoil, signs of soil life abundant throughout.

Good – minor dense or platy layer, good crumbly soil, few horizontal, more downward roots through the soil profile, signs of numerous soil life throughout.

Fair – thin dense or platy layer present, roots are somewhat horizontal and increasing downward, surface horizon moderately darker than subsoil, soil life scattered throughout.

Low – dense or moderate platy later noticeable, numerous horizontal roots, scattered signs of soil life at the surface.

Poor – dense or thick platy later very distinct, roots are mostly horizontal, surface and subsurface soil color is the same, few to no signs of soil life.

Field # / Name	High	Good	Fair	Low	Poor
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

PA8. To determine if the carbon stocks on your pasture land unit are stable or increasing, we have a few statements below. Select which statement bset matches the conditions on each pasture unit.

None - Very low plant cover, one dominant forage species (functional group), not evenly grazed, no identifiable plant residue or heavy thatch, (greater than 1 inch) standing dead forage is greater than 25%

Low - Plant cover low, 2-5 forage species from one functional group, at least one species avoided by livestock permitting mature seed stalks, species in patches, 1-10% residue or thatch between .5-1 inch, 15-25% standing dead forage.

High - Spot grazed low and high, plant cover high, 3-4 forage species with one being a legume, all compatible growth habit and comparable palatability, 20-30% residue, no thatching, less than 5% standing dead forage.

Maximum - Very high plant cover (thick stand), 4-5 forage species representing 3 functional groups, at least 1 legume, mixed well with compatible palatability, 30-70% residue, no thatch buildup, no standing dead forage.

Field # / Name	None	Low	High	Maximum
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

Range Section

Please list each range unit (field number or name) on your operation and mark its location on a map.

_____

_____

_____

_____

R1. The below options relate to the soil and site stability of the range unit. Indicate which option best fits by range management unit (field number or name).

1. Site stable with little evidence of erosion or potential for erosion.
2. Site has minimal erosion and minimal potential for erosion.
3. Site has moderate amounts of erosion and moderate potential for new erosion.
4. Site is lacking diversity of native perennial plants with plant health and productivity less than desired.
5. Site is grossly lacking plant diversity and has poor plant productivity and health.

Field # / Name	Option Number

R2. The below options relate to the biotic function of the range unit. Indicate which option best fits by range management unit (field number or name).

1. Site has diverse composition of native perennial plants which are healthy and productive.
2. Site has diverse composition of native perennial plants but could be more productive.
3. Site has moderate amounts of the desired native perennial plants and is moderately productive.
4. Site is lacking diversity of native perennial plants with plant health and productivity less than desired.
5. Site is grossly lacking plant diversity and has poor plant productivity and health.

Field # / Name	Option Number

Range Section

R3. The below options relate to the hydrology of the range unit. Indicate which option best fits by range management unit (field number or name).

1. Site has good cover of live and dead plant material and very little bare ground.
2. Site has good cover of live and dead plant material but slightly more than desired bare ground.
3. Site has moderate cover of live and dead plant material and moderate amounts of bare ground.
4. Site is lacking live plant cover and has little dead plant residue and large amounts of bare ground.
5. Site is lacking live plant cover and little to no dead plant residue and excessive amounts of bare ground.

Field # / Name	Option Number

R4. What estimated percentage of each range management unit is invasive species (non-native species that harm the environment or humans)? If invasive species are present, are they uncommon, scattered, common or dominant?

Field # / Name	Percent Invasive Species	Uncommon	Scattered	Common	Dominant
		☐	☐	☐	☐
		☐	☐	☐	☐
		☐	☐	☐	☐
		☐	☐	☐	☐

R5. To determine if the carbon stocks on your range land unit are stable or increasing, we have a few statements below. Select which statement best matches the conditions on each range unit.

None - erosion is present and will result in substantial soil losses, site is grossly lacking plant diversity and has poor health, and there is little plant cover and residue resulting in excessive amounts of bare ground.

Low - erosion is present and there is a potential for future erosion across the area, site is lacking native perennial plant diversity and the health is less than desired, and there is little plant cover, residue, and large amounts of bare ground..

Moderate - moderate amounts of erosion and potential for new erosion, moderate amounts of native perennial plants and productivity, and moderate cover of live/dead plant material and bare ground.

High - erosion is minimal and there is minimal potential for future erosion, there is diverse native perennial plants, but they could be more productive, and there is good cover of live and dead plant material but slightly more than desired bare ground..

Maximum - it is stable with little evidence of erosion potential, there is diverse plants that are healthy and productive, and there is good cover of live and dead plant material and very little bare ground.

Field # / Name	None	Low	Moderate	High	Maximun
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

Forest Section

Please list each management unit number/name on your operation and mark its location on a map.

F1. What primary tree species (by management unit) are on your property?	
Management Unit	**Species**

F2. Do you have a forest management plan?	☐ Yes ☐ No
If so, have you implemented all practices in the plan to the current date?	☐ Yes ☐ No

F3. Are the tree species primarily native **and** best suited for the site **and** in line with your objectives?	
Management Unit	**Yes/No**

F4. According to the forest management plan or forest inventory are the stocking levels appropriate for the site **and** in line with your objectives?	
Management Unit	**Yes/No**

Forest Section

F5. Regarding tree vigor, what is the estimated percentage of dead and dying trees in the management unit?

Management Unit	Percent

F6. Regarding forest community quality and according to the forest management plan or forest inventory, what estimated percentage of the management unit meets the habitat type or ecological site descriptions including expected density, composition, and age structure?

Management Unit	Percent

F7. Do you have any pests on your forestland (native plants, insects, diseases that have ecological or economic effects)?

Have you done any treatments of the pest?

If so, is the damage still affecting your goals and future conditions for the management unit(s)?

Management Unit	Pests Present	Treatment Done	Damage Still Affects Goals
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

F8. Do you have any invasive species (non-native species that harm the environment or humans) on your forestland?

Have you completed a treatment of the invasive?

If so, is the damage still affecting your goals and future conditions for the management unit(s)?

Management Unit	Invasives Present	Treatment Completed	Damage Still Affects Goals
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

Forest Section

F9. Utilizing the Wildfire Hazard Potential Map, what is the predominate category for wildfire hazard potential on each management unit? https://www.firelab.org/project/wildfire-hazard-potential - very low, low, moderate, high or very high?

Management Unit	Very Low	Low	High	Moderate	Very High
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐
	☐	☐	☐	☐	☐

F10. According to the forest management plan or forest inventory, what estimated percentage of the site has forest conditions that will support the ignition and propagation of an active wildfire?

Management Unit	Percent

F11. To determine if the carbon stocks on your forestland is stable or increasing, is your management unit overstocked or understocked? And is the stand actively managed or not?

Management Unit	Overstocked	Understocked	Actively Managed
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐
	☐	☐	☐

Land Conversion Section

LC1. Is there threat of conversion from agricultural land to non-agricultural uses to your property.	☐ Yes ☐ No
LC2. Is there a threat of conversion from grassland to non-grassland uses to your property.	☐ Yes ☐ No

Glossary

Land Use Terms

Crop - Land used primarily for the production and harvest of annual or perennial field, forage, food, fiber, horticultural, orchard, vineyard, or energy crops.

Forest - Land on which the historic and/or introduced vegetation is predominantly tree cover managed for the production of wood products or non-timber forest products.

Range - Land on which the historic and/or introduced vegetation is predominantly grasses, grass-like plants, forbs or shrubs managed as natural ecosystem. Range land may include natural grasslands, savannas, shrublands, tundra, alpine communities, marshes and meadows.

Pasture - Land composed of introduced or domesticated native forage species that is used primarily for the production of livestock. Pastures receive periodic renovation and cultural treatments, such as tillage, fertilization, mowing, weed control, and may be irrigated. Pastures are not in rotation with crops.

Farmstead - Land used for facilities and supporting infrastructure where farming, forestry, animal husbandry, and ranching activities are often initiated. This may include dwellings, equipment storage, plus farm input and output storage and handling facilities. Also includes land dedicated to the facilitation and production of high-intensity animal agriculture in a containment facility where daily nutritional requirements are obtained from other lands or feed sources.

Developed Land - Land occupied by buildings and related facilities used for residences, commercial sites, public highways, airports, and open space associated with towns and cities. Water - Geographic area whose dominant characteristic is open water or permanent ice or snow. May include intermingled land, including tidal-influenced coastal marsh lands.

Associated Agriculture Lands - Land associated with farms and ranches that are not purposefully managed for food, forage, or fiber and are typically associated with nearby production or conservation lands. This could include incidental areas, such as idle center pivot corners, odd areas, ditches and watercourses, riparian areas, field edges, seasonal and permanent wetlands, and other similar areas.

Other Rural Land - Land that is barren, sandy, rocky, or that is impacted by the extraction of natural resources, such as minerals, gravel or sand, coal, shale, rock, oil, or natural gas.

Land Use Modifier - Modifiers provide another level of specificity and help denote what the land is managed for.

The modifiers are:

- **Irrigated -** Used when an operational system is present and managed to supply water.
- **Wildlife -** Used when the client is actively managing for wildlife.
- **Grazed -** Used when grazing animals impact how land is managed.
- **Drained -** Used when artificial drainage exists that has an impact on how the land is managed.
- **Organic -** Used on field which has met the organic or transitioning to organic criteria.
- **Water Feature -** Used to identify that the planned land unit contains or is adjacent to a water feature, such as a stream, lake, river, spring, irrigation ditch, etc.
- **Protected -** The land unit is under a conservation easement or similar protection.
- **Hayed -** Used when hay production is the primary activity.
- **Urban -** Used when land is located in a landscape predominated by residential, commercial, industrial, and transportation uses.

Glossary

Other Terms

Aggradation - Geologic process by which a stream bottom is raised in elevation by the deposition of sediments.

Aquifer - A body of porous rock or sediment saturated with groundwater.

Carbon - A nonmetallic chemical element with atomic number 6 that readily forms compounds with many other elements and is a constituent of organic compounds in all known living tissues.

Conventional tillage - A crop management system with multiple full-width tillage passes throughout the rotation. Sugar beet, potato, and large-scale organic grain production are examples of conventional tillage.

Embedded - Degree to which gravel and cobble substrates in riffles are surrounded by fine sediment.

Functional Group - A suite or group of plant species that, because of similar shoot or root structure, photosynthetic pathways, nitrogen fixing ability, life cycle, etc., are grouped together on an ecological site basis.

Headcut - An erosional feature characterized by an abrupt vertical drop in the stream bed, otherwise known as a kickpoint.

IPM (Integrated Pest Management) - A series of pest management evaluations that follows a four-tiered approach, including setting action thresholds, monitoring pests, prevention, and control.

Mulch-till - A crop management system which has minimal soil disturbance throughout the rotation. Hoe-drills used in a dryland rotation and strip-till in an irrigated rotation are examples of mulch-till

No-till - A crop management system that uses either a single- or double-disc opener for seeding and no other soil disturbance throughout the rotation. Hoe drills are not considered no-till.

NOx (Nitrogen Oxide) - Is any .of several oxides of nitrogen most of which are produced in combustion and are considered to be atmospheric pollutants.

PAMS (Prevention, Avoidance, Monitoring, Supression) - Strategies to address Integrated Pest Management.

PM (Particulate Matter) - The term for a mixture of solid particles and liquid droplets found in the air.

Riffle - A shallow section in a stream where water is breaking over rocks, wood, or other partly submerged debris and producing surface agitation.

VOC (Volatile Organic Compounds) - Organic chemical compounds whose composition makes it possible for them to evaporate under normal indoor atmospheric conditions of temperature and pressure.

Addendum to Conservation Planning Workbook

Name: _____ Date: _____

Project objectives (list objectives and note if objectives have changed or been updated):

_____

_____

_____

☐ CSP renewal application (already have the assessment information on file)

☐ New CSP application with all required answers to assessment questions on file (NRCS worked with producer in recent years)

Changes from previous application (e.g., new resource concern, different land use, etc.)

_____

_____

_____

Improvements to existing operation:

_____

_____

New practices being applied:

_____

_____

Are past activities / practices being maintained:

_____

_____

Notes:

_____

_____

_____

NRCS Documentation Review: I have reviewed all required participant documentation

Participant Signature: _____ Date: _____

NRCS Signature: _____ Date: _____

MT-2025 • September 2025