

# Section III

## Resource Management Systems

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### INTRODUCTION

Conservation planning is a natural resource problem solving and management process. The process integrates economic, social, and ecological considerations to meet private and public needs. This approach, which emphasizes desired future conditions, helps improve natural resource management, minimize conflict, and address problems and opportunities. The nine step planning process used by NRCS is discussed in detail in the National Planning Procedures Handbook (NPPH).

The first step in the planning process is an initial determination of the client's problems, opportunities, and concerns related to natural resources and human considerations within the planning area. EXHIBIT 1—Checklist of Resource Problems or Conditions in the NPPH or Montana Resource Concern ID Worksheet Form A or B, is based on categories of resources, considerations, and resource “aspects” which correspond to the column headings found in the “Conservation Practices Physical Effects” (CPPE) matrix located in the Field Office Technical Guide (FOTG), Section V—Conservation Efforts.

Resource inventories and an analysis of resource data are completed in steps three and four. The results of this analysis are compared to quality criteria to document the kind, amount, and extent of existing and potential resource problems.

A broad range of technically feasible conservation alternatives is developed with the client. Alternatives may include structural and management measures as well as measures that mitigate potential adverse impacts on the resources. The purpose of formulating alternatives is to provide the most effective, efficient, and economical conservation treatments that address resource concerns and are acceptable to the client in solving problems, addressing opportunities, and meeting the stated objectives.

The conservation alternatives are developed to a Resource Management System (RMS) level. An RMS is a combination of practices that, when installed, will meet or exceed established quality criteria for identified soil, water, animals, plants and air resource problems for resource sustainability. The installation of the planned practices will provide for the long-term conservation, protection, and/or improvement of the resource base. When one or more of the resource concerns do not meet the minimum requirements for sustainability, planning is considered progressive. Progressive planning is when a client is ready, willing, and able to make some, but not all, of the decisions necessary to achieve a RMS level of management.

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## Resource Management System Formulation

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The Resource Management System formulation process is discussed in detail in the National Planning Procedures Handbook (NPPH).

The preplanning phase can involve the use of information found in the Field Office Technical Guide (FOTG). These include:

- **General Resource References for Resource Planning:**

Field office resource inventory and other supporting data are located in FOTG, Section I.

Site and soils information is found in the FOTG, Section II.

- **Conservation Practice Physical Effects (CPPE) Document:**

The CPPE document is in the FOTG, Section V-A-1.

- **Quality Criteria:**

Quality Criteria are in the FOTG, Section III.

- **Guidance Documents:**

Guidance documents are located in the FOTG, Section III. These documents are usually specific for a particular area, generally a county or a group of counties.

- **Conservation Effects for Decisionmaking:**

The FOTG, Section V-B shows effects of applying practices in the RMS examples.

# Resource Management System Formulation

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NO INFORMATION

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## Resource Management System Quality Criteria

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### INTRODUCTION

Quality criteria establish the minimum treatment level necessary to adequately address the natural resource considerations that are identified during the planning process for the development of a Resource Management System (RMS). Quality criteria are quantitative or qualitative statements that are established in accordance with local, state, and federal programs and regulations in consideration of ecological, economic and social effects.

TABLE 1—National and State Resource Concerns and Quality Criteria, identifies the resource concerns that must be addressed in Montana. This table lists minimum treatment criteria for natural resource planning at the RMS level.

Resource concerns identified using EXHIBIT 1—Checklist of Resource Problems or Conditions in the NPPH or Montana Resource Concern ID Worksheet FORM A or B that are not listed in the column titled “State Quality Criteria” in TABLE 1 still need to be addressed if they have been identified as a resource concern in Step 1 of the planning process. These checklists are based on the categories of resources, considerations, and resource “aspects” which correspond to the column headings found in the “Conservation Practices Physical Effects” (CPPE) matrix located in the Field Office Technical (FOTG), Section V. These checklists should be retained and used as a reference when first doing an on-site resource inventory. The resource checklist can

provide planners with a comprehensive list of potential planning considerations.

### DEFINITIONS

**Quality Criteria**—Refers to the level or condition of the resource that is considered to be minimally acceptable. All technical assistance provided to resource users will be directed toward achieving the criteria level established for SWAPA—soil, water, air, plants, animals. Resource quality criteria provide a means of determining the adequacy of technical assistance to land users by evaluating the ability of planned Resource Management Systems (RMS) to achieve certain levels in an acceptable time frame.

**Resources and Considerations**—NRCS policy lists five resources (SWAPA) to include in all technical assistance efforts. The policy contains specific considerations related to each of the resources for which criteria were developed. Both the resources and their respective considerations are addressed individually.

**Treatment Standards**—Refers to the planned and/or applied conservation measures necessary to achieve quality criteria in the resources of concern. Resource quality criteria provide a “goal,” while treatment standards provide the “means” by which to reach that goal. Treatment standards are the basis for RMS and serve as the measure of adequacy for planned treatment.

# Resource Management System Quality Criteria

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## ESTABLISHMENT OF QUALITY CRITERIA

In the establishment of criteria, the following basic rules were followed for consistency and uniformity.

1. Quality Criteria statements reflect a minimally acceptable **CONDITION** of the resource. Quality Criteria are quantifiable and have a tool to provide measurement. All resource concerns that may be addressed during the planning process may not have established quality criteria.
2. Established criteria represent a **MINIMUM** level that is acceptable for a resource or resource concern. Because resource concerns, as written in policy, are problem oriented, criteria in effect state the acceptable level of change in a resource.
3. Quality Criteria are quantifiable. Terms for criteria must state clearly "*when enough is enough*," so that planners know when planned treatment is adequate.
4. Quality Criteria levels must be **ATTAINABLE** with current technology and approved conservation practices.
5. Quality Criteria relate directly to an acceptable **PLANNING** level.
6. Quality Criteria of the resource represents a level that **SUSTAINS** the use and productivity of the resource indefinitely. There may be some negative short term effects on the resources to obtain the long term positive effects.

7. Quality Criteria levels should be **USABLE, MEASURABLE, and/or RECOGNIZABLE.**

## APPLICATION OF QUALITY CRITERIA

Quality Criteria establishes the minimum treatment level necessary to adequately address the resource concerns identified during the planning process for the development of a RMS.

The RMS criteria are met when treatment has been planned that, when applied, will resolve all of the identified resource problems (concerns) according to the Quality Criteria. The RMS will be considered applied when all of the conservation practices that make up the system have been installed, implemented or applied according to the FOTG, Section IV—Practice Standards and Specifications.

In some instances, actions by individual decisionmakers cannot solve the resource concerns because it involves more than one decisionmaker. In these instances, group planning, project measures or multiprogram activities may be required to meet the respective Quality Criteria. In cases where the decisionmaker can not solve the problem as an individual, the criteria will be met when the land under the control of the decisionmaker does not adversely contribute to the problem.

The use and implementation of these criteria will be consistent with federal, state, and local laws and regulations.

## Resource Management System Quality Criteria

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### PLANNING RESOURCE MANAGEMENT SYSTEMS

A Resource Management System (RMS) is a combination of practices that will solve the identified resource problems to at least the level indicated in the quality criteria and meet the cooperators' objectives. Successful resource management is dependent on the correct application of the practices that make up a RMS for managing the soil, vegetation, and/or harvesting of vegetation. These practices are essential to prevent resource degradation and ensure sustainable use. Other practices are used to enhance the resource management system and/or adequately treat a resource concern.

TABLE 2—Conservation Planning Guide, contains the framework for development of RMS level conservation plans. This table can be developed on a Major Land Resource Area (MLRA) basis in order to maintain consistency across state and/or agency boundaries. All resource concerns listed in the “Primary Resource Concern” column **must** be evaluated for **each** major land use, as a minimum, to achieve RMS level plans. The column labeled “Essential Practices” includes conservation practices that will generally address the listed resource concerns. These practices will be the **minimally** accepted practices contained in the conservation plan to meet a RMS. The column labeled “Other Practices” lists practices alphabetically that may also be needed to compliment the Essential Practices, depending upon the circumstances.

These “Other Practices” are **not required**, but may be needed to complement the plan. Any practice in the Field Office Technical Guide (FOTG), Section IV can be included in the plan.

TABLE 2 is sorted by common systems, as listed in the National Planning Procedures Handbook (NPPH). A RMS must satisfy the quality criteria for the “Primary Resource Concerns” and address other resource concerns, as needed, on a case by case basis. Technical judgement will be required to determine treatment levels for resource concerns with no measurable quality criteria. The practices listed in TABLE 2 are the commonly used practices for that land use, but any practice contained in the FOTG, Section IV may be used to address any resource concern.

All practices contained in the FOTG, Section IV must be applied according to its specifications. Change in the primary resource concerns will be measured by the respective assessment tool when available. Resource concerns without an assessment tool will be considered adequately treated when the practice(s) used to treat the resource concern has been installed according to the specifications developed for the practice.

## Resource Management System Quality Criteria

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NO INFORMATION

**TABLE 1. NATIONAL AND STATE—RESOURCE CONCERNS AND QUALITY CRITERIA**

NATURAL RESOURCE CONCERN	DESCRIPTION OF CONCERN	NATIONAL QUALITY CRITERIA	STATE QUALITY CRITERIA	ASSESSMENT TOOLS FOR QUALITY CRITERIA EVALUATION
<b>SOIL</b>				
<b>Soil Erosion—Sheet and Rill</b>	Detachment and transport of soil particles caused by rainfall splash and runoff degrade soil quality.	Sheet and rill erosion does not exceed the Soil Loss Tolerance "T".	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>Current erosion prediction tool, i.e., Revised Universal Soil Loss Equation (RUSLE2).</li> </ul>
<b>Soil Erosion—Wind</b>	Detachment and transport of soil particles caused by wind degrade soil quality and/or damage plants and cause sedimentation.	Wind erosion does not exceed the Soil Loss Tolerance "T" or, for plant damage, does not exceed Crop Damage Tolerances.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>Current Erosion prediction tool, i.e., Wind Erosion Equation (WEQ) Management Period Method.</li> </ul>
<b>Soil Erosion—Ephemeral Gully</b>	Small channels caused by surface water runoff degrade soil quality and tend to increase in size. On cropland, they can be obscured by heavy tillage.	Surface water runoff is controlled sufficiently to stabilize the small channels and prevent reoccurrence of new channels.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>Volume calculation.</li> </ul>
<b>Soil Erosion—Classic Gully</b>	Deep, permanent channels caused by the convergence of surface runoff degrade soil quality. They enlarge progressively by headcutting and lateral widening.	Surface water runoff is controlled sufficiently to stop progression of headcutting and widening.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>Volume calculation.</li> <li>Aerial photo trend analysis.</li> <li>Ocular analysis.</li> </ul>
<b>Soil Erosion—Streambank</b>	Accelerated loss of streambank soils restricts land and water use and management.	Accelerated streambank soil loss does not exceed a level commensurate with upstream land use and normal geomorphological processes on site.	Assessment tool shows condition of stream is healthy or if off-site conditions cause the stream to be unhealthy, then landowner is not contributing to the problem.	<ul style="list-style-type: none"> <li>Montana NRCS Riparian Assessment Method.</li> </ul>

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<b>SOIL</b>				
<b>Soil Erosion—Shoreline</b>	Soil is eroded along shorelines by wind and wave action, causing physical damage to vegetation, limiting land use, or creating a safety hazard.	Shoreline erosion is stabilized to a level that does not restrict the use or management of adjacent land, water or structures.	NA	<ul style="list-style-type: none"> <li>• Ocular analysis.</li> </ul>
<b>Soil Erosion—Irrigation-induced</b>	Improper irrigation water application and equipment operation are causing soil erosion that degrades soil quality.	Irrigation-induced erosion does not exceed the Soil Loss Tolerance “T”.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Imhoff Cone measurement.</li> </ul>
<b>Soil Erosion—Mass Movement</b>	Soil slippage, landslides, or slope failure, normally on hillsides, result in large volumes of soil movement.	Shallow slumps, slides, or slips are prevented or minimized so that the mass movement of soil material does not exceed naturally occurring rates.	NA	
<b>Soil Erosion—Road, road sides and Construction Sites</b>	Soil loss occurs on areas left unprotected during or after road building and/or construction activities.	Sites are adequately protected from soil loss during and after road building and construction activities.	NA	
<b>Soil Condition—Organic Matter Depletion</b>	Soil organic matter has or will diminish to a level that degrades soil quality.	Soil Conditioning Index is positive.	The calculation of the Soil Condition Rating Index Value will reflect a positive soil condition for cropland.	<ul style="list-style-type: none"> <li>• Soil Conditioning Index.</li> <li>• Aggregate Stability Test from Soil Quality Test Kit.</li> <li>• Soil Quality Scorecard.</li> </ul>
<b>Soil Condition—Compaction</b>	Compressed soil particles and aggregates caused by mechanical compaction adversely affect plant-soil-moisture relationships.	Mechanically compacted soils are renovated sufficiently to restore plant root growth and/or water movement.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Bulk density test-Soil Quality Kit.</li> </ul>
<b>Soil Condition—Subsidence</b>	Loss of volume and depth of organic soils due to oxidation caused by above normal microbial activity resulting from excessive drainage or extended drought.	The timing and regime of soil moisture is managed to attain acceptable subsidence rates.	NA	

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<b>SOIL</b>				
<b>Soil Condition–Contaminants–Salts and Other Chemicals</b>	Inorganic chemical elements and compounds such as salts, selenium, boron, and heavy metals restrict the desired use of the soil or exceed the soil buffering capacity.	Salinity levels cause less than a 10% decrease in plant yield. Other contaminants do not exceed plant tolerances or are below toxic levels for plants or animals.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Soil test.</li> <li>• Soil Quality Kit- EC meter.</li> </ul>
<b>Soil Condition–Contaminants–Animal Waste and Other Organics</b>	Nutrient levels from applied animal waste and other organics restrict desired use of the land.	Nutrient application levels do not exceed soil storage/plant uptake capacities based on soil test recommendations and risk analysis results.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Soil test.</li> <li>• Phosphorus Index.</li> <li>• Application records.</li> <li>• Yield records/history.</li> <li>• Agriculture Waste Management (AWM) software.</li> <li>• AFO/Pro software.</li> </ul>
<b>Soil Condition–Contaminants–Commercial Fertilizer</b>	Over application of nutrients degrades plant health and vigor, or exceeds the soil capacity to retain nutrients.	Soil nutrient levels do not exceed crop needs based on realistic yield goals and appropriate pH levels are maintained.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Soil test.</li> <li>• Phosphorus Index.</li> <li>• Application records.</li> <li>• Yield records/history.</li> </ul>
<b>Soil Condition–Contaminants–Residual Pesticides</b>	Residual pesticides in the soil have an adverse effect on non-target plants and animals.	Pesticides are applied, stored, handled, and disposed of so that residues in the soil do not adversely affect non-target plants and animals.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• WIN–PST.</li> <li>• Application records.</li> <li>• Yield records/history.</li> </ul>
<b>Soil Condition–Damage from Soil Deposition</b>	Sediment deposition damages or restricts land use/management or adversely affects ecological processes.	Sediment deposition is sufficiently reduced to maintain desired land use/management and ecological processes.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Volume calculation.</li> <li>• Current water and wind erosion prediction tools (RUSLE2 and WEQ) coupled with sediment delivery ratios.</li> </ul>

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<b>WATER</b>				
<b>Water Quantity—Excessive Seepage</b>	Subsurface water oozing to the surface restricts land use and management.	Subsurface water is managed to limit periods of saturation that are unfavorable to the present or intended land use. Management complies with wetland policies.	NA	
<b>Water Quantity—Excessive Runoff, Flooding, or Ponding</b>	The land becomes inundated restricting land use and management.	Excess water amounts and/or rates of flow are controlled consistent with desired present or intended land use goals and wetland policies.	NA	<ul style="list-style-type: none"> <li>• SRFR for irrigation practices.</li> </ul>
<b>Water Quantity—Excessive Subsurface Water</b>	Water saturates upper soil layers restricting land use and management.	Subsurface water is managed to limit periods of saturation compatible with the present or intended land use and wetland policies.	NA	
<b>Water Quantity—Drifted Snow</b>	Wind-blown snow deposits and accumulates around and over surface structures restricting ingress, egress and conveyance of humans and animals.	Snowdrifts are reduced or prevented to allow ingress, egress, and conveyance of humans and animals.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Depth and area measurements.</li> </ul>
<b>Water Quantity—Inadequate Outlets</b>	Natural or constructed outlets too small to remove excess water in a timely manner.	Outlets are designed, installed, upgraded or maintained to adequately convey water for present or intended uses.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• National Engineering Handbook, Part 650 (EFH—Chapters 2, 3, 7).</li> <li>• Hydrologic models, e.g., HECRAS, TR-20, TR-55.</li> </ul>

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<b>WATER</b>				
<b>Water Quantity—Inefficient Water Use on Irrigated Land</b>	Limited water supplies are not optimally utilized.	Land and water management is planned and coordinated to provide optimal use of natural and applied moisture.	Irrigation water is applied according to an irrigation water management plan, which considers plant consumptive use requirements, soil water holding capacity, and minimizes losses to surface and groundwater to the extent feasible. A minimum on-farm seasonal irrigation efficiency of 30% will be met regardless of the type of system.	<ul style="list-style-type: none"> <li>• Farm Irrigation Rating System (FIRS).</li> <li>• Farm Irrigation Rating Index (FIRI).</li> <li>• Irrigation Water Management Specification.</li> <li>• Use of Surface Irrigation Model (SRFR) to model infiltration and length of runs.</li> </ul>
<b>Water Quantity—Inefficient Water Use on Non-irrigated Land</b>	Natural moisture is not optimally utilized.	Management provides optimum use of natural moisture for the present or intended land use.	NA	<ul style="list-style-type: none"> <li>• Paul Brown probe and guidelines for flex crop.</li> </ul>
<b>Water Quantity—Reduced Capacity of Conveyances by Sediment Deposition</b>	Sediment deposits in ditches, canals, culverts, and other water conveyances reduce the desired flow capacity.	Conveyance structures are upgraded or maintained to adequately convey water for present or intended uses.	NA	<ul style="list-style-type: none"> <li>• Annual measurements.</li> </ul>
<b>Water Quantity—Reduced Storage of Water Bodies by Sediment Accumulation</b>	Sediment deposits in water bodies reduce the desired volume capacity.	Water bodies and contributing source areas are treated to allow sufficient water storage for present and intended uses.	NA	<ul style="list-style-type: none"> <li>• Annual measurements.</li> </ul>
<b>Water Quantity—Aquifer Overdraft</b>	Water withdrawals exceed recharge rates.	Land and water management are coordinated to conserve aquifer water levels.	NA	<ul style="list-style-type: none"> <li>• Ground Water Information Center records from USGS and Montana Bureau of Mines &amp; Geology.</li> </ul>

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<b>WATER</b>				
<b>Water Quantity—Insufficient Flows in Water Courses</b>	Water flows are not consistently available in sufficient quantities to support ecological processes and land use and management.	Authorized uses and management of water are coordinated to minimize the impacts on watercourse flows.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Water flow records.</li> <li>• Gauge Station data.</li> <li>• Consumptive use/allocation water rights.</li> <li>• Montana Fish, Wildlife &amp; Parks dewatered streams list.</li> <li>• Wetted perimeter method.</li> </ul>
<b>Water Quality—Harmful Levels of Pesticides in Groundwater</b>	Residues resulting from the use of pest control chemicals degrade groundwater quality.	Pesticides are applied, stored, handled, disposed of, and managed so that groundwater uses are not adversely affected.	NA	<ul style="list-style-type: none"> <li>• Sample and analysis.</li> <li>• Montana Dept. of Ag. Groundwater Protection Program.</li> </ul>
<b>Water Quality—Excessive Nutrients and Organics in Groundwater</b>	Pollution from natural or human induced nutrients such as N, P, and organics (including animal and other wastes) degrades groundwater quality.	Nutrients and organics are stored, handled, disposed of, and applied such that groundwater uses are not adversely affected.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• National Engineering Handbook, Part 651, Ag. Waste Mgt. Field Handbook.</li> <li>• Nitrate Leaching Index.</li> <li>• Phosphorus Leaching Index.</li> <li>• Montana NRCS Env. Tech. Note 1.</li> <li>• Sample and analysis.</li> </ul>
<b>Water Quality—Excessive Salinity in Groundwater</b>	Pollution from salts such as Ca, Mg, Na, K, HCO <sub>3</sub> , CO <sub>3</sub> , Cl, and SO <sub>4</sub> degrades groundwater quality.	Salts are stored, handled, disposed of, applied, and managed such that groundwater uses are not adversely affected.	NA	<ul style="list-style-type: none"> <li>• Sample and analysis.</li> <li>• Ec Meter.</li> <li>• Montana NRCS Env. Tech. Note 1.</li> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> </ul>
<b>Water Quality—Harmful Levels of Heavy Metals in Groundwater</b>	Natural or human induced metal pollutants present in toxic amounts degrade groundwater quality.	Materials containing heavy metals are stored, handled, disposed of, applied, and managed such that groundwater uses are not adversely affected.	NA	<ul style="list-style-type: none"> <li>• Montana NRCS Env. Tech. Note 1.</li> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> </ul>
<b>Water Quality—Harmful Levels of Pathogens in Groundwater</b>	Kinds and numbers of viruses, protozoa, and bacteria are present at a level that degrades groundwater quality.	Materials that harbor pathogens are stored, handled, disposed of, applied, and managed such that groundwater uses are not adversely affected.	NA	<ul style="list-style-type: none"> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> </ul>
<b>Water Quality—Harmful Levels of Petroleum in Groundwater</b>	Fuel, oil, gasoline, and other hydrocarbons present in toxic amounts degrade groundwater quality.	Petroleum products are used, stored, handled, disposed of, and managed such that groundwater uses are not adversely affected.	NA	<ul style="list-style-type: none"> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> <li>• Sample and analysis.</li> </ul>

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<b>WATER</b>				
<b>Water Quality—Harmful Levels of Pesticides in Surface Water</b>	Pest control chemicals present in toxic amounts degrade surface water quality.	Pesticides are applied, stored, handled, disposed of, and managed such that surface water uses are not adversely affected	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• WIN-PST (Windows Pesticide Screening Tool—USDA/NRCS).</li> <li>• Farm-A-Syst.</li> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> <li>• Applicable state or federally approved TMDL Allocation Plan.</li> </ul>
<b>Water Quality—Excessive Nutrients and Organics in Surface Water</b>	Pollution from natural or human induced nutrients such as N, P, and organics (Including animal and other wastes) degrades surface water quality.	Nutrients and organics are stored, handled, disposed of, and managed such that surface water uses are not adversely affected.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Phosphorus Index.</li> <li>• Nitrogen Leaching Index.</li> <li>• National Engineering Handbook, Part 651, Ag. Waste Mgt. Field Handbook.</li> <li>• Surface water chemical/particle sampling and assay.</li> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> <li>• Applicable state or federally approved TMDL Allocation Plan.</li> <li>• Montana NRCS Env. Tech. Note 1.</li> </ul>
<b>Water Quality—Excessive Suspended Sediment and Turbidity in Surface Water</b>	Pollution from mineral or organic particles degrades surface water quality.	Movement of mineral and organic particles is managed such that surface water uses are not adversely affected.	NA	<ul style="list-style-type: none"> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> <li>• Sample and analysis.</li> <li>• Applicable state or federally approved TMDL Allocation Plan.</li> </ul>
<b>Water Quality—Excessive Salinity in Surface Water</b>	Pollution from salts such as Ca, Mg, Na, K, HCO <sub>3</sub> , CO <sub>3</sub> , Cl, and SO <sub>4</sub> degrades surface water quality.	Salts are stored, handled, disposed of, applied, and managed such that surface water uses are not adversely affected.	NA	<ul style="list-style-type: none"> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> <li>• Sample and analysis.</li> <li>• Applicable state or federally approved TMDL Allocation Plan.</li> </ul>

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<b>WATER</b>				
<b>Water Quality—Harmful Levels of Heavy Metals in Surface Water</b>	Natural or human induced metal pollutants are present in toxic amounts that degrade surface water quality.	Materials containing heavy metals are stored, handled, disposed of, applied, and managed such that surface water uses are not adversely affected.	NA	<ul style="list-style-type: none"> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> <li>• Sample and analysis.</li> <li>• Applicable state or federally approved TMDL Allocation Plan.</li> </ul>
<b>Water Quality—Harmful Temperatures of Surface Water</b>	Undesired thermal conditions degrade surface water quality.	Use and management of land and water are coordinated to minimize impacts on surface water temperatures.	NA	<ul style="list-style-type: none"> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> </ul>
<b>Water Quality—Harmful Levels of Pathogens in Surface Water</b>	Kinds and numbers of viruses, protozoa, and bacteria are present at a level that degrades surface water quality.	Materials that harbor pathogens are stored, handled, disposed of, applied, and managed such that surface water uses are not adversely affected.	NA	<ul style="list-style-type: none"> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> </ul>
<b>Water Quality—Harmful Levels of Petroleum in Surface Water</b>	Fuel, oil, gasoline, and other hydrocarbons present in toxic amounts degrade surface water quality.	Petroleum products are used, stored, handled, and disposed of such that groundwater uses are not adversely affected.	NA	<ul style="list-style-type: none"> <li>• WQB-7 (Montana DEQ report giving Montana numeric water quality standards).</li> </ul>

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NATURAL RESOURCE CONCERN	DESCRIPTION OF CONCERN	NATIONAL QUALITY CRITERIA	STATE QUALITY CRITERIA	ASSESSMENT TOOLS FOR QUALITY CRITERIA EVALUATION
<b>AIR</b>				
<b>Air Quality– Particulate matter less than 10 micrometers in diameter (PM 10)</b>	Particulate matter less than 10 micrometers in diameter are suspended in the air causing potential health hazards to humans and animals.	Land use and management operations comply with PM 10 requirements of the state or federal Implementation Plan and all applicable federal, tribal, state, and local regulations.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Specific guidelines contained in state or federal Implementation Plan; or other approved NRCS tool.</li> <li>• Air quality analysis.</li> </ul>
<b>Air Quality– Particulate matter less than 2.5 micrometers in diameter (PM 2.5)</b>	Particulate matter less than 2.5 micrometers in diameter are suspended in the air causing potential health hazards to humans and animals.	Land use and management operations comply with PM 2.5 requirements of the state or federal Implementation Plan and all applicable federal, tribal, state, and local regulations.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Specific guidelines contained in state or federal Implementation Plan; or other approved NRCS tools.</li> </ul>
<b>Air Quality– Excessive Ozone</b>	High concentrations of ozone (O <sub>3</sub> ) are adversely affecting human health, reducing plant yields, and leading to the creation of smog.	Land use and management operations comply with requirements of the state or federal Implementation Plan and all applicable federal, tribal, state, and local regulations.	NA	
<b>Air Quality– Excessive Greenhouse Gas– CO<sub>2</sub> (carbon dioxide)</b>	Increased CO <sub>2</sub> concentrations are adversely affecting ecosystem processes.	Land use and management operations comply with requirements of the state or federal Implementation Plan and all applicable federal, tribal, state, and local regulations.	NA	
<b>Air Quality– Excessive Greenhouse Gas– N<sub>2</sub>O (nitrous oxide)</b>	Increased N <sub>2</sub> O concentrations are adversely affecting ecosystem processes.	Land use and management operations comply with requirements of the state or federal Implementation Plan and all applicable federal, tribal, state, and local regulations.	NA	
<b>Air Quality– Excessive Greenhouse Gas– CH<sub>4</sub> (methane)</b>	Increased CH <sub>4</sub> concentrations are adversely affecting ecosystem processes.	Land use and management operations comply with requirements of the state or federal Implementation Plan and all applicable federal, tribal, state, and local regulations.	NA	<ul style="list-style-type: none"> <li>• Testing at Animal Feeding Operations.</li> </ul>

**TABLE 1. NATIONAL AND STATE—RESOURCE CONCERNS AND QUALITY CRITERIA**

NATURAL RESOURCE CONCERN	DESCRIPTION OF CONCERN	NATIONAL QUALITY CRITERIA	STATE QUALITY CRITERIA	ASSESSMENT TOOLS FOR QUALITY CRITERIA EVALUATION
<b>AIR</b>				
<b>Air Quality–Ammonia (NH3)</b>	Animal waste and inorganic commercial fertilizers emit ammonia that contributes to odor, is a PM 2.5 precursor, and contributes to acid rain.	Land use and management operations comply with requirements of all applicable federal, tribal, state, and local regulations.	NA	
<b>Air Quality–Chemical Drift</b>	Materials applied for pest control drift downwind and contaminate/injure non-targeted fields, crops, soils, water, animals and humans.	Land use and management operations comply with all applicable federal, tribal, state, and local regulations, and applicable label directions.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Approved NRCS technical guidance and tools.</li> <li>• Pest Management Standard.</li> </ul>
<b>Air Quality–Objectionable Odors</b>	Land use and management operations produce offensive smells.	Odor-producing facilities and activities are planned and sited to mitigate potential nuisance impacts and meets all applicable federal, tribal, state, and local regulations.	NA	
<b>Air Quality–Reduced Visibility</b>	Sight distance is impaired due to airborne particles causing unsafe conditions and impeded viewing of natural vistas especially in Class I viewing areas (primarily national parks and monuments).	Land use and management operations comply with all applicable federal, tribal, state, and local regulations including state and local smoke and/or burn management plans.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Visual assessment.</li> <li>• Regional air partnership recommendations and/or state guidance for smoke management.</li> </ul>
<b>Air Quality–Undesirable Air Movement</b>	Wind velocities (too little or too much) reduce animal or plant productivity, impact human comfort and increase energy consumption.	Devices and practices are sited and planned to mitigate excess or deficient air movement.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Approved NRCS technical guidance and tools.</li> </ul>
<b>Air Quality–Adverse Air Temperature</b>	Air temperatures (too cold or too hot) reduce animal or plant productivity, impact human comfort and increase energy consumption.	Devices and practices are planned and sited to mitigate temperature extremes.	NA	

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NATURAL RESOURCE CONCERN	DESCRIPTION OF CONCERN	NATIONAL QUALITY CRITERIA	STATE QUALITY CRITERIA	ASSESSMENT TOOLS FOR QUALITY CRITERIA EVALUATION
<b>PLANTS</b>				
<p><b>Plants Not Adapted or Suited</b></p>	<p>Plants are not adapted and/or suited to site conditions or client objectives.</p>	<p>Selected plants are adapted to the soil and climatic conditions or the site is modified to make it suitable for the desired plants. Plants are sustainable, do not negatively impact other resources, and meet client objectives. For specific land uses, additional criteria apply:</p> <p><b>Cropland:</b> A healthy stand with vigorous growth. Yields 75% of client expectations.</p> <p><b>Rangeland:</b> Plants on or planned for the site are listed in applicable Ecological Site Descriptions (ESD).</p> <p><b>Pastureland:</b> Plants on or planned for the site have a site adaptation score greater than 3 using Pasture Condition Scoring (PCS) and are listed in applicable Forage Suitability Groups (FSG) reports.</p> <p><b>Hayland:</b> Plants on or planned for the site are listed in applicable Forage Suitability Groups (FSG) reports.</p> <p><b>Forestland/Agroforest:</b> Plants on or planned for the site are listed in Ecological Site Descriptions (ESD).</p>	<p>NA</p>	

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NATURAL RESOURCE CONCERN	DESCRIPTION OF CONCERN	NATIONAL QUALITY CRITERIA	STATE QUALITY CRITERIA	ASSESSMENT TOOLS FOR QUALITY CRITERIA EVALUATION
<b>PLANTS</b>				
<p><b>Plant–Condition–Productivity, Health, and Vigor</b></p>	<p>Plants do not produce the yields, quality, and soil cover to meet client objectives.</p>	<p>Selected plants on or planned for the site are sufficiently productive to meet or exceed client needs. For specific land uses, additional criteria apply:</p> <p><b>Cropland:</b> A healthy stand with vigorous growth produces at least 75% of site potential.</p> <p><b>Rangeland:</b> The plant community has a similarity index of at least 60% or an upward trend for similarity indices less than 60%.</p> <p><b>Pastureland:</b> Forage yields are at least 75% of high management estimates cited in FSG reports.</p> <p><b>Hayland:</b> Forage yields at least 75% of high mgt. estimates cited in Forage Suitability Groups (FSG) reports.</p> <p><b>Forestland/Agroforest:</b> Forests consist of healthy stands with vigorous growth having a stand density within 25% of optimum stocking on a stems/acre basis. Plants chosen for agroforest applications are consistent with Conservation Tree/Shrub Suitability Groups (CTSG) listings and height performance.</p>	<p><b>Cropland</b>—A healthy, vigorous stand that meets the producer's yield goals given the yield potential for the soil map unit. Organic matter percent is 50% of native condition or if less than 50%, organic matter is improving; Electrical conductivity (EC) below 4 MMHOS.</p> <p><b>Grazingland</b>—Maintaining a plant community with a similarity index of 65% or more or having an upward trend for plant communities with a similarity index of less than 65% of the potential plant community.</p> <p><b>Pastureland</b>—A healthy, vigorous stand that meets the livestock nutrition and forage needs, is adapted to the site for long-term production and protects the soil. Pasture Inventory Worksheet rating of "High" or Pasture Condition Score Sheet rating of "4" for all categories.</p>	<ul style="list-style-type: none"> <li>• Client interview.</li> <li>• Plant tissue and harvest analysis.</li> <li>• Nutrient Management.</li> <li>• Diversity Index.</li> <li>• Intensity Index.</li> <li>• NRCS discipline manuals/handbooks.</li> <li>• National Range and Pasture Handbook.</li> <li>• Pasture Inventory Worksheet.</li> <li>• Ecological Site Descriptions.</li> <li>• Rangeland Similarity Index Worksheet.</li> <li>• Forage Balance Worksheet.</li> <li>• Rangeland Trend Worksheet.</li> <li>• Grazed Forest Evaluation Worksheet.</li> <li>• Forage Suitability Groups (FSG).</li> <li>• Plot sampling of understory vegetation.</li> <li>• Soil survey reports.</li> <li>• Soil Testing (O.M. percent, E.C.).</li> <li>• Crop/soil yield comparisons in the vicinity.</li> <li>• Pasture Condition Score Sheet.</li> <li>• Rangeland Health Assessment.</li> <li>• Forest resource inventory (MT-ECS-1 form) to determine current stocking rate, species composition, stand condition, approximate age, current and past growth, site productivity, understory composition, basal area measurement, and note any insect/disease concerns.</li> </ul>

TABLE 1. NATIONAL AND STATE—RESOURCE CONCERNS AND QUALITY CRITERIA

NATURAL RESOURCE CONCERN	DESCRIPTION OF CONCERN	NATIONAL QUALITY CRITERIA	STATE QUALITY CRITERIA	ASSESSMENT TOOLS FOR QUALITY CRITERIA EVALUATION
<b>PLANTS</b>				
<p><b>Plant-Condition-Productivity, Health and Vigor (CONTINUED)</b></p>	<p>Plants do not produce the yields, quality, and soil cover to meet client objectives.</p>		<p><b>Hayland</b>—A healthy, vigorous stand of desired, adapted species that meets the producer’s yield goals given the yield potential for the species for the given forage suitability group.</p> <p><b>Forestland</b>—Forest overstory stocking levels are within 25% of the “D+X” spacing guide (See Practice 666—Forest Stand Improvement) or equivalent for the particular site and stand composition; trees within the stand are uniformly distributed. Understory plant community is comprised of 50% or more, by weight, of expected species for the site and is proportionate with over story canopy. Bare mineral soil comprises 25% or less of ground surface area.</p>	

**TABLE 1. NATIONAL AND STATE—RESOURCE CONCERNS AND QUALITY CRITERIA**

NATURAL RESOURCE CONCERN	DESCRIPTION OF CONCERN	NATIONAL QUALITY CRITERIA	STATE QUALITY CRITERIA	ASSESSMENT TOOLS FOR QUALITY CRITERIA EVALUATION
<b>PLANTS</b>				
<b>Plant–Condition–Productivity, Health and Vigor (CONTINUED)</b>	Plants do not produce the yields, quality, and soil cover to meet client objectives.		Bare mineral soil comprises 25% or less of ground surface area.	
<b>Plant Condition–Threatened or Endangered Plant Species</b>	Plant populations and /or habitat quantity and quality have reached a level that one or more plant species are in danger of or threatened with extinction.	Threatened and endangered plant species and/or habitats they occupy are managed to avoid actions that would reduce their current population, health, or sustainability.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• General Manual, 190, Part 410.</li> <li>• US Fish and Wildlife Service county endangered species lists.</li> <li>• Federal and state endangered species rules and regulations.</li> <li>• US Fish and Wildlife Service Recovery Plans.</li> </ul>
<b>Plant Condition–Noxious and Invasive Plants</b>	The site has noxious or invasive plants present.	The site is managed to control noxious and invasive plants and to minimize their spread.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• State or local noxious weed list.</li> </ul>
<b>Plant Condition–Forage Quality and Palatability</b>	Plants do not have adequate nutritive value or palatability for the intended use.	Forage plants are managed to produce the desired nutritive value and palatability for the intended use.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• NIRS Forage Quality Analysis (NUTBAL).</li> <li>• Plant tissue analysis.</li> </ul>
<b>Plant Condition–Wildfire Hazard</b>	The kinds and amounts of fuel loadings (plant biomass) pose risks to human safety, structures, and resources should wildfire occur.	Fuel loadings are reduced and/or isolated to meet client needs in minimizing the risk and incidence of wildfire.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• Visual assessment protocols.</li> <li>• Site and flammable biomass inventories.</li> <li>• Aerial photo analysis.</li> </ul>

**TABLE 1. NATIONAL AND STATE—RESOURCE CONCERNS AND QUALITY CRITERIA**

NATURAL RESOURCE CONCERN	DESCRIPTION OF CONCERN	NATIONAL QUALITY CRITERIA	STATE QUALITY CRITERIA	ASSESSMENT TOOLS FOR QUALITY CRITERIA EVALUATION
<b>ANIMALS</b>				
<b>Fish and Wildlife—Inadequate Food</b>	Quantity and quality of food is unavailable to meet the life history requirements of the species or guild of species of concern.	Food availability meets the life history requirements of the species or guild of species of concern.	Wildlife Habitat Evaluation Guide Index is 0.4 or greater for cropland, pasture and hayland; 0.6 or greater for rangeland and forestland; and 0.75 or greater for wildlife land.	<ul style="list-style-type: none"> <li>• State Adapted Wildlife Habitat Evaluation Guide.</li> </ul>
<b>Fish and Wildlife—Inadequate Cover/Shelter</b>	Cover/shelter for the species of concern is unavailable or inadequate. For aquatic species, this includes lack of hiding, thermal, and/or refuge cover.	The ecosystem or habitat types support the necessary plant species in the kinds, amounts, and physical structure; and the connectivity of fish and wildlife cover is adequate to support, over time, the species of concern.	Wildlife Habitat Evaluation Guide Index is 0.4 or greater for cropland, pasture and hayland; 0.6 or greater for rangeland and forestland; and 0.75 or greater for wildlife land.	<ul style="list-style-type: none"> <li>• State Adapted Wildlife Habitat Evaluation Guide.</li> </ul>
<b>Fish and Wildlife—Inadequate Water</b>	The quantity and quality of water is unacceptable for the species of concern.	The quantity and quality of water meets the life history requirements of the species of concern.	Wildlife Habitat Evaluation Guide Index is 0.4 or greater for cropland, pasture and hayland; 0.6 or greater for rangeland and forestland; and 0.75 or greater for wildlife land.	<ul style="list-style-type: none"> <li>• State Adapted Wildlife Habitat Evaluation Guide.</li> </ul>
<b>Fish and Wildlife—Inadequate Space</b>	Lack of area and fragmentation of areas disrupt life history requirements of the species of concern.	Adequate area and connectivity of areas meet life history requirements of the species of concern. (Examples: staging areas for rest and feeding, lekking areas for breeding, migratory movement corridors)	Wildlife Habitat Evaluation Guide Index is 0.4 or greater for cropland, pasture and hayland; 0.6 or greater for rangeland and forestland; and 0.75 or greater for wildlife land.	<ul style="list-style-type: none"> <li>• State Adapted Wildlife Habitat Evaluation Guide.</li> </ul>

**TABLE 1. NATIONAL AND STATE—RESOURCE CONCERNS AND QUALITY CRITERIA**

NATURAL RESOURCE CONCERN	DESCRIPTION OF CONCERN	NATIONAL QUALITY CRITERIA	STATE QUALITY CRITERIA	ASSESSMENT TOOLS FOR QUALITY CRITERIA EVALUATION
<b>ANIMALS</b>				
<b>Fish and Wildlife—Plant Community Fragmentation</b>	Natural plant communities have insufficient structure, extent, and connectivity to provide ecological functions and/or achieve management objectives.	Fish and wildlife habitat functions of connected plant communities are maintained sufficiently to support the species or guild of species of concern	Wildlife Habitat Evaluation Guide Index is 0.4 or greater for cropland, pasture and hayland; 0.6 or greater for rangeland and forestland; and 0.75 or greater for wildlife land.	<ul style="list-style-type: none"> <li>• State Adapted Wildlife Habitat Evaluation Guide.</li> </ul>
<b>Fish and Wildlife—Imbalance Among and Within Populations</b>	Populations are not in proportion to available quantities and qualities of food (plants, predator/prey), cover/shelter, water, and space and other life history requirements.	Land and water use and management are consistent with direct population management activities conducted by fish and wildlife agencies.	NA	
<b>Fish and Wildlife—Threatened and Endangered Species</b>	Fish and wildlife populations and/or habitat quantity and quality have reached a level that one or more species are in danger of or threatened with extinction.	Threatened and endangered fish and wildlife species and/or habitats they occupy are managed to avoid actions that would reduce their current population, health, or sustainability.	SAME AS NATIONAL	<ul style="list-style-type: none"> <li>• General Manual, 190, Part 410.</li> <li>• US Fish and Wildlife Service county endangered species lists.</li> <li>• Fish and wildlife recovery plans.</li> <li>• Federal and state endangered species rules and regulations.</li> </ul>
<b>Domestic Animals—Inadequate Quantities and Quality of Feed and Forage</b>	Total feed and forage is insufficient to meet the nutritional and production needs of the kinds and classes of livestock.	Feed and forage including supplemental nutritional requirements are provided to meet production goals for the kinds and classes of livestock. Native grazers are factored into the total feed and forage balance computations.	Domestic animals are provided adequate food of sufficient quality and quantity with supplements to meet their nutritional requirements.	<ul style="list-style-type: none"> <li>• National Range and Pasture Handbook</li> <li>• Nutritional Balance Program (NUTBAL)</li> <li>• NIRS/Nutritional Balance Profile Program (NUTBAL Pro).</li> <li>• Forage quality laboratory analysis.</li> <li>• Forage Balance Worksheet.</li> <li>• Similarity Index Worksheet.</li> </ul>
<b>Domestic Animals—Inadequate Shelter</b>	Livestock are not protected sufficiently to meet the production goals for the kinds and classes of livestock	Artificial and/or natural shelter is provided to meet production goals for the kinds and classes of livestock.	Domestic animals are provided adequate shelter and cover.	<ul style="list-style-type: none"> <li>• National Range and Pasture Handbook</li> <li>• Appropriate NRCS Guides and Tools.</li> </ul>

**TABLE 1. NATIONAL AND STATE—RESOURCE CONCERNS AND QUALITY CRITERIA**

NATURAL RESOURCE CONCERN	DESCRIPTION OF CONCERN	NATIONAL QUALITY CRITERIA	STATE QUALITY CRITERIA	ASSESSMENT TOOLS FOR QUALITY CRITERIA EVALUATION
<b>ANIMALS</b>				
<b>Domestic Animals—Inadequate Stock Water</b>	The quantity, quality and distribution of drinking water is insufficient to meet the production goals for the kinds and classes of livestock.	Sufficient water of acceptable quality is provided and adequately distributed to meet production goals for the kinds and classes of livestock. To reduce potential for water contamination, watering facilities are constructed or modified to minimize mortality to indigenous wildlife.	Domestic animals are provided sufficient quantity and quality of water to meet their daily needs.	<ul style="list-style-type: none"> <li>• National Range and Pasture Handbook</li> <li>• Appropriate NRS Guides and Tools.</li> </ul>
<b>Domestic Animals— Stress and Mortality</b>	Animals exhibit illness or death from disease, parasites, insects, poisonous plants, or other factors.	Land and water use and management are consistent with activities conducted to alleviate stress and mortality factors.	NA	

TABLE 2. MONTANA—CONSERVATION PLANNING GUIDE—RESOURCE MANAGEMENT SYSTEM (RMS) LEVEL CONSERVATION PLANNING

SYSTEM	PRIMARY RESOURCE CONCERN	ESSENTIAL PRACTICES	OTHER PRACTICES	
<b>CROP</b>	<b>SOIL</b> 1) Erosion a) All Resource Concerns 2) Condition a) All Resource Concerns  <b>WATER</b> 1) Quantity a) All Resource Concerns 2) Quality a) All Resource Concerns  <b>AIR</b> 1) Quality a) All Resource Concerns  <b>PLANTS</b> 1) Not Adapted or Suited a) All Resource Concerns 2) Condition a) All Resource Concerns  <b>ANIMALS</b> 1) Fish and Wildlife a) All Resource Concerns 2) Domestic Animals a) All Resource Concerns		ALL PRACTICES LISTED IN SECTION IV OF THE FOTG CAN BE USED TO ADDRESS RESOURCE NEEDS	
		328 Conservation Crop Rotation	327 Conservation Cover	
		449 Irrigation Water Management (*)	589A Crosswind Ridges	
		590 Nutrient Management	589C Crosswind Trap Strips	
		595 Pest Management	386 Field Border	
		Residue Management	393 Filter Strip	
		ONE OF THE FOLLOWING:	412 Grassed Waterway	
		329B Mulch Till	603 Herbaceous Wind Barriers	
		329A No-Till & Strip Till	550 Range Planting (CRP)	
		329C Ridge Till	643 Restoration & Management of Declining Habitats	
		344 Seasonal	391 Riparian Forest Buffer	
			571 Soil Salinity Management (non-irrigated)	
			610 Toxic Salt Reduction	
			645 Upland Wildlife Habitat Management	
			638 Water & Sediment Control Basin	
			633 Waste Utilization	
			644 Wetland Wildlife Habitat Management	
			380 Windbreak/Shelterbelt Establishment	
			(*) APPLICABLE ONLY ON IRRIGATED LAND	
		<b>HAY</b>	<b>SOIL</b> 1) Erosion a) All Resource Concerns 2) Condition a) All Resource Concerns	
511 Forage Harvest Management	328 Conservation Crop Rotation			
449 Irrigation Water Management (*)	590 Nutrient Management			
	512 Pasture & Hayland Planting			
	595 Pest Management			
	550 Range Planting			
	645 Upland Wildlife Habitat Management			
	644 Wetland Wildlife Habitat Management			

TABLE 2. MONTANA—CONSERVATION PLANNING GUIDE—RESOURCE MANAGEMENT SYSTEM (RMS) LEVEL CONSERVATION PLANNING

SYSTEM	PRIMARY RESOURCE CONCERN	ESSENTIAL PRACTICES	OTHER PRACTICES
<p><b>HAY</b> CONTINUED</p>	<p><b>WATER</b> 1) Quantity a) All Resource Concerns 2) Quality a) All Resource Concerns</p> <p><b>AIR</b> 1) Quality a) All Resource Concerns</p> <p><b>PLANTS</b> 1) Not Adapted or Suited a) All Resource Concerns 2) Condition a) All Resource Concerns</p> <p><b>ANIMALS</b> 1) Fish and Wildlife a) All Resource Concerns 2) Domestic Animals a) All Resource Concerns</p>	<p>(*) APPLICABLE ONLY ON IRRIGATED LAND</p>	<p>ALL PRACTICES LISTED IN SECTION IV OF THE FOTG CAN BE USED TO ADDRESS RESOURCE NEEDS</p>
			<p><b>PASTURE</b></p>

TABLE 2. MONTANA—CONSERVATION PLANNING GUIDE—RESOURCE MANAGEMENT SYSTEM (RMS) LEVEL CONSERVATION PLANNING

SYSTEM	PRIMARY RESOURCE CONCERN	ESSENTIAL PRACTICES	OTHER PRACTICES
<p><b>PASTURE</b> CONTINUED</p>	<p><b>PLANTS</b> 1) Not Adapted or Suited a) All Resource Concerns 2) Condition a) All Resource Concerns</p> <p><b>ANIMALS</b> 1) Fish and Wildlife a) All Resource Concerns 2) Domestic Animals a) All Resource Concerns</p>		<p>ALL PRACTICES LISTED IN SECTION IV OF THE FOTG CAN BE USED TO ADDRESS RESOURCE NEEDS</p>
<p><b>RANGE LAND</b></p>	<p><b>SOIL</b> 1) Erosion a) All Resource Concerns 2) Condition a) All Resource Concerns</p> <p><b>WATER</b> 1) Quantity a) All Resource Concerns 2) Quality a) All Resource Concerns</p> <p><b>AIR</b> 1) Quality a) All Resource Concerns</p> <p><b>PLANTS</b> 1) Not Adapted or Suited a) All Resource Concerns 2) Condition a) All Resource Concerns</p>	<p>528 Prescribed Grazing</p>	<p>314 Brush Management 382 Fence 595 Pest Management 516 Pipeline 378 Pond 338 Prescribed Burning 645 Upland Wildlife Habitat Management 472 Use Exclusion 644 Wetland Wildlife Habitat Management</p>

TABLE 2. MONTANA—CONSERVATION PLANNING GUIDE—RESOURCE MANAGEMENT SYSTEM (RMS) LEVEL CONSERVATION PLANNING

SYSTEM	PRIMARY RESOURCE CONCERN	ESSENTIAL PRACTICES	OTHER PRACTICES
<b>RANGE LAND</b> CONTINUED	<b>ANIMALS</b> 1) Fish and Wildlife a) All Resource Concerns 2) Domestic Animals a) All Resource Concerns		ALL PRACTICES LISTED IN SECTION IV OF THE FOTG CAN BE USED TO ADDRESS RESOURCE NEEDS
<b>FOREST</b>	<b>SOIL</b> 1) Erosion a) All Resource Concerns 2) Condition a) All Resource Concerns  <b>WATER</b> 1) Quantity a) All Resource Concerns 2) Quality a) All Resource Concerns  <b>AIR</b> 1) Quality a) All Resource Concerns  <b>PLANTS</b> 1) Not Adapted or Suited a) All Resource Concerns 2) Condition a) All Resource Concerns  <b>ANIMALS</b> 1) Fish and Wildlife a) All Resource Concerns 2) Domestic Animals a) All Resource Concerns	666 Forest Stand Improvement	394 Firebreak
			490 Forest Site Preparation
			655 Forest Trails & Landings
			595 Pest Management
			338 Prescribed Burning
			612 Tree/Shrub Establishment
			660 Tree/Shrub Pruning
			645 Upland Wildlife Habitat Management
			472 Use Exclusion
			644 Wetland Wildlife Habitat Management

TABLE 2. MONTANA—CONSERVATION PLANNING GUIDE—RESOURCE MANAGEMENT SYSTEM (RMS) LEVEL CONSERVATION PLANNING

SYSTEM	PRIMARY RESOURCE CONCERN	ESSENTIAL PRACTICES	OTHER PRACTICES
<b>GRAZED FOREST</b>			ALL PRACTICES LISTED IN SECTION IV OF THE FOTG CAN BE USED TO ADDRESS RESOURCE NEEDS
	<b>SOIL</b>	666 Forest Stand Improvement	314 Brush Management
	1) Erosion a) All Resource Concerns	528 Prescribed Grazing	382 Fence
	2) Condition a) All Resource Concerns		394 Firebreak
			490 Forest Site Preparation
			655 Forest Trails & Landings
			595 Pest Management
	<b>WATER</b>		516 Pipeline
	1) Quantity a) All Resource Concerns		378 Pond
	2) Quality a) All Resource Concerns		338 Prescribed Burning
			574 Spring Development
	<b>AIR</b>		612 Tree/Shrub Establishment
	1) Quality a) All Resource Concerns		660 Tree/Shrub Pruning
			645 Upland Wildlife Habitat Management
	<b>PLANTS</b>		472 Use Exclusion
1) Not Adapted or Suited a) All Resource Concerns		642 Water Well	
2) Condition a) All Resource Concerns		614 Watering Facility	
		644 Wetland Wildlife Habitat Management	
<b>ANIMALS</b>			
1) Fish and Wildlife a) All Resource Concerns			
2) Domestic Animals a) All Resource Concerns			

TABLE 2. MONTANA—CONSERVATION PLANNING GUIDE—RESOURCE MANAGEMENT SYSTEM (RMS) LEVEL CONSERVATION PLANNING

SYSTEM	PRIMARY RESOURCE CONCERN	ESSENTIAL PRACTICES	OTHER PRACTICES	
<b>WILDLIFE</b>	<b>SOIL</b>	645 Upland Wildlife Habitat Management and/or 644 Wetland Wildlife Habitat Management	ALL PRACTICES LISTED IN SECTION IV OF THE FOTG CAN BE USED TO ADDRESS RESOURCE NEEDS	
			327 Conservation Cover	
	1) Erosion a) All Resource Concerns			656 Constructed Wetland
				402 Dam
	2) Condition a) All Resource Concerns			356 Dike
				647 Early Successional Habitat Development
	<b>WATER</b>			382 Fence
				595 Pest Management
				378 Pond
				338 Prescribed Burning
	1) Quantity a) All Resource Concerns			528 Prescribed Grazing
				643 Restoration & Management of Declining Habitats
	2) Quality a) All Resource Concerns			391 Riparian Forest Buffer
				390 Riparian Herbaceous Cover
	<b>AIR</b>			646 Shallow Water Management for Wildlife
				574 Spring Development
	1) Quality a) All Resource Concerns			395 Stream Habitat Improvement & Management
				580 Streambank & Shoreline Protection
	<b>PLANTS</b>			587 Structure for Water Control
				612 Tree/Shrub Establishment
				472 Use Exclusion
				658 Wetland Creation
	<b>ANIMALS</b>			659 Wetland Enhancement
				657 Wetland Restoration
				648 Wildlife Watering Facility
				380 Windbreak/Shelterbelt Establishment
650 Windbreak/Shelterbelt Renovation				
a) All Resource Concerns				

TABLE 2. MONTANA—CONSERVATION PLANNING GUIDE—RESOURCE MANAGEMENT SYSTEM (RMS) LEVEL CONSERVATION PLANNING

SYSTEM	PRIMARY RESOURCE CONCERN	ESSENTIAL PRACTICES	OTHER PRACTICES
<p><b>HEAD- QUARTERS</b></p>	<p><b>SOIL</b></p> <p>1) Erosion a) All Resource Concerns</p> <p>2) Condition a) All Resource Concerns</p> <p><b>WATER</b></p> <p>1) Quantity a) All Resource Concerns</p> <p>2) Quality a) All Resource Concerns</p> <p><b>AIR</b></p> <p>1) Quality a) All Resource Concerns</p> <p><b>PLANTS</b></p> <p>1) Not Adapted or Suited a) All Resource Concerns</p> <p>2) Condition a) All Resource Concerns</p> <p><b>ANIMALS</b></p> <p>1) Fish and Wildlife a) All Resource Concerns</p> <p>2) Domestic Animals a) All Resource Concerns</p>		<p>ALL PRACTICES LISTED IN SECTION IV OF THE FOTG CAN BE USED TO ADDRESS RESOURCE NEEDS</p> <p>317 Composting Facility</p> <p>362 Diversion</p> <p>382 Fence</p> <p>393 Filter Strip</p> <p>394 Firebreak</p> <p>561 Heavy Use Area Protection</p> <p>634 Manure Transfer</p> <p>595 Pest Management</p> <p>558 Roof Runoff Structure</p> <p>570 Runoff Management System</p> <p>645 Upland Wildlife Habitat Management</p> <p>312 Waste Management System</p> <p>313 Waste Storage Facility</p> <p>359 Waste Treatment Lagoon</p> <p>633 Waste Utilization</p> <p>614 Watering Facility</p> <p>351 Well Decommissioning</p> <p>644 Wetland Wildlife Habitat Management</p> <p>380 Windbreak/Shelterbelt Establishment</p> <p>650 Windbreak/Shelterbelt Renovation</p>

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TABLE 2. MONTANA—CONSERVATION PLANNING GUIDE—RESOURCE MANAGEMENT SYSTEM (RMS) LEVEL CONSERVATION PLANNING

SYSTEM	PRIMARY RESOURCE CONCERN	ESSENTIAL PRACTICES	OTHER PRACTICES
<p><b>HEAD-QUARTERS AFO/CAFO</b></p>	<p><b>SOIL</b></p> <p>1) Erosion a) All Resource Concerns</p> <p>2) Condition a) All Resource Concerns</p> <p><b>WATER</b></p> <p>1) Quantity a) All Resource Concerns</p> <p>2) Quality a) All Resource Concerns</p> <p><b>AIR</b></p> <p>1) Quality a) All Resource Concerns</p> <p><b>PLANTS</b></p> <p>1) Not Adapted or Suited a) All Resource Concerns</p> <p>2) Condition a) All Resource Concerns</p> <p><b>ANIMALS</b></p> <p>1) Fish and Wildlife a) All Resource Concerns</p> <p>2) Domestic Animals a) All Resource Concerns</p>		<p>ALL PRACTICES LISTED IN SECTION IV OF THE FOTG CAN BE USED TO ADDRESS RESOURCE NEEDS</p>
		<p>313 Waste Storage Facility</p>	<p>366 Anaerobic Digester, Controlled Temperature</p>
		<p>633 Waste Utilization</p>	<p>360 Closure of Waste Impoundments</p>
			<p>317 Composting Facility</p>
			<p>327 Conservation Cover</p>
			<p>342 Critical Area Planting</p>
			<p>356 Dike</p>
			<p>362 Diversion</p>
			<p>382 Fence</p>
			<p>393 Filter Strip</p>
			<p>410 Grade Stabilization Structure</p>
			<p>412 Grassed Waterway</p>
			<p>561 Heavy Use Area Protection</p>
			<p>442 Irrigation System, Sprinkler</p>
			<p>634 Manure Transfer</p>
			<p>590 Nutrient Management</p>
			<p>516 Pipeline</p>
			<p>521 Pond Sealing and Lining</p>
			<p>533 Pumping Plant</p>
			<p>558 Roof Runoff Structure</p>
			<p>570 Runoff Management System</p>
	<p>587 Structure for Water Control</p>		
	<p>359 Waste Treatment Lagoon</p>		
	<p>638 Water and Sediment Control Basin</p>		
	<p>642 Water Well</p>		
	<p>614 Watering Facility</p>		
	<p>380 Windbreak/Shelterbelt Establishment</p>		

TABLE 2. MONTANA—CONSERVATION PLANNING GUIDE—RESOURCE MANAGEMENT SYSTEM (RMS) LEVEL CONSERVATION PLANNING

SYSTEM	PRIMARY RESOURCE CONCERN	ESSENTIAL PRACTICES	OTHER PRACTICES
<p><b>URBAN</b></p>	<p><b>SOIL</b></p> <p>1) Erosion a) All Resource Concerns</p> <p>2) Condition a) All Resource Concerns</p> <p><b>WATER</b></p> <p>1) Quantity a) All Resource Concerns</p> <p>2) Quality a) All Resource Concerns</p> <p><b>AIR</b></p> <p>1) Quality a) All Resource Concerns</p> <p><b>PLANTS</b></p> <p>1) Not Adapted or Suited a) All Resource Concerns</p> <p>2) Condition a) All Resource Concerns</p> <p><b>ANIMALS</b></p> <p>1) Fish and Wildlife a) All Resource Concerns</p> <p>2) Domestic Animals a) All Resource Concerns</p>		<p>ALL PRACTICES LISTED IN SECTION IV OF THE FOTG CAN BE USED TO ADDRESS RESOURCE NEEDS</p>
			<p>342 Criteria Area Treatment</p>
			<p>362 Diversion</p>
			<p>410 Grade Stabilization Structure</p>
			<p>412 Grassed Waterways</p>
			<p>582 Open Channel</p>
			<p>350 Sediment Basin</p>

