

Montana's Conservation Measurement Tool

Ag Land – General Inventory

Date:
Prepared By:
Enter Producer Name:
Enter Farm/Tract Number:
Enter County:

Questions	Response
<p>1. Do you have any water bodies (ponds, lakes, or wetlands) or water courses (streams, rivers or ditches) on the indicted land use?</p> <ul style="list-style-type: none"> • Cropland • Pastureland • Range 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>2. Do you have unpaved farm roads used by farm vehicles (does not include unpaved county roads or other unpaved public roads) or other unpaved public roads) or other unpaved areas such as feedlots or material handling areas that frequently result in significant dust generation, reducing visibility along the road or over the unpaved area for extended periods?</p> <p>If Yes, Check any of the following methods you regularly use to control dust:</p> <ul style="list-style-type: none"> • Regularly spraying water to reduce the dust • Apply biodegradable oils to reduce the dust • Gravel surfacing • Apply other environmental benign dust control chemicals • None of the above 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<p>3. Identify Each energy conservation reduction method used on your farm:</p>	
<p>Have you replaced electric motors or engines on your farm with high efficiency models in the last 3 years? A “yes” answer considers the following:</p> <ul style="list-style-type: none"> • The motors should be labeled as “premium”, which means they are more efficient than the current DOE standard. • Considers only electric motors that are used for major activities on the farm such as pumps to move water or waste, ventilation fans, etc. • Refer to the ANSI/ASABE S612 Performing On-Farm Energy Audits for a list of “major activities”. 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Do you use alternative energy sources (solar, wind, biofuels, green energy) to replace fossil fuel energy uses on your farm? A “yes” answer considers the following examples:</p> <ul style="list-style-type: none"> • Wind or solar powered pumps • Solar powered electric fencing • Any biofuel blend 	<input type="checkbox"/> Yes <input type="checkbox"/> No

<p>Have you improved the efficiency of heating, cooling or drying operations on your farm in the last 3 years? A “yes” answer considers the following:</p> <ul style="list-style-type: none"> • Evaluation is conducted on how energy efficient a particular grain drying system is rather than a comparison of one system versus another. • Refer to the decision tree to determine if an applicant has an energy efficient grain drying system. 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Have you conducted an energy audit on your farm and are now implementing the energy audit actions? A “yes” answer considers the energy audit complies with ANSI/ASABE S612 Performing On-Farm Energy Audits.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Have you performed a pumping plant evaluation during the last 3 years and implemented the recommendations? A “yes” answer considers the following: High efficiency pumping plants installed within last 3 years or recognized through pumping plant evaluation, include those using solar or other renewable energy sources. Pumping plants should include:</p> <ul style="list-style-type: none"> • A Tier III or Tier IV diesel motor • Using a variable frequency drive and/or • Have had a pumping plant evaluation and implemented its recommendations in the last 3 years. 	<input type="checkbox"/> Yes <input type="checkbox"/> No

Montana's Conservation Measurement Tool

Cropland Existing Activity Conservation Performance

	Acres
Enter Crop Rotation #1 Description and Name:	
Enter Crop Rotation #2 Description and Name:	
Enter Crop Rotation #2 Description and Name:	
Enter Crop Rotation #2 Description and Name:	
Enter Crop Rotation #2 Description and Name:	

Questions	Rotation 1	Rotation 2	Rotation 3	Rotation 4	Rotation 5
<p>1. Enter the length of your rotation or management systems in “years”. The number of years is the time it takes to complete the entire rotation before you start with the first crop again. For example: corn-wheat-double crop soybeans-cotton is a three year rotation. Corn-soybeans-corn-soybeans-wheat is a five year rotation. Winter wheat-corn-millet-fallow would be a four year rotation. For continuous cropping or permanent crops, such as orchards, use one year as your rotation length. If your cropping system is not fixed, pick your most commonly planted crops as an example.</p>	<input style="width: 40px; height: 40px;" type="text"/>				
<p>2. Based on your rotation or management system, enter the number of your harvested crops that are included in each of the categories below (a-e). Crops are grouped based on residue quality and quantity. Do not include cover crops in your responses. Examples: If you have corn and wheat in your rotation, you would enter a “2” for question 2d. For a corn and soybean rotation, enter “1” in 2c (for beans) and “1” in 2d (for corn).</p> <p>a) Enter the number of occurrences in your rotation or</p>	<input style="width: 40px; height: 40px;" type="text"/>				

<p>3.2 Enter the percent (expressed as a decimal number) of the time the management system has a cover crop maintained between the rows.</p>					
<p>3.3 Choose the answer below (a-c) that best describes when the cover crop is terminated.</p> <p>a. Cover crop is terminated prior to flowering for non-legumes or between 0-24% bloom for legumes or brassicas</p> <p>b. Cover crop is terminated at or after flowering but prior to seed development for non-legumes or between 25-49% bloom for legumes or brassicas</p> <p>c. Cover crop is terminated at or after soft dough stage for non-legumes or after 50% bloom for legumes or brassicas</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C				
<p>4. Enter the number of different crop species/types in your rotation or management system, including different types of cover crops. For example, a corn, soybeans, wheat rotation with a fall cover crop would be 4. A corn, corn, soybean rotation would be 2.</p> <p>(Montana Note: Example: Winter wheat-peas-spring wheat-peas = 3 different crop types. Also, planting pasture or hayland counts as 1.)</p>					
<p>5. Do you intentionally flood at least 1/3 of the crop for wetland wildlife when crops are not growing? If “NO” skip to Question 6.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				

<p>5.2 Cropland is intentionally flooded:</p> <p>a) Less than 2 months per year.</p> <p>b) 2 months per year on heavy clay soils (Hydrologic group C or D).</p> <p>c) 3 months per year on heavy clay soils (Hydrologic group C or D).</p> <p>d) 4 months per year on heavy clay soils (Hydrologic group C or D).</p> <p>e) More than 4 months per year on heavy clay soils (Hydrologic group C or D).</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E
<p>5.3 Cropland is intentionally flooded:</p> <p>a) Less than 2 out of 3 years.</p> <p>b) 2 out of 3 years.</p> <p>c) Annual flooding.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C				
<p>5.4 Considering all of your cropland, what percentage is normally flooded?</p> <p>a) Less than 33%</p> <p>b) 33 – 50%</p> <p>c) 51 – 75%</p> <p>d) More than 75%</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>6. Does your rotation, orchard or vineyard include perennial hay, grass or legume cover?</p> <p>(Montana Note: does not include annual harvested legumes.)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<p>6.1 How many years of hay or other perennial(s) do you have in your rotation? OR How often do you grow a cover between rows in your orchard or vineyard? - include the establishment year.</p>					

<p>6.2 From the STATE populated look up table and the choices below (a-d) select the one that best describes the mix of plants growing in your hay fields. From the State populated look up table-Select 'Species info' button to view lists.</p> <p>a) Hayland is composed of species from List B.</p> <p>b) Hayland is predominantly species from List B but one or more species from List A makes up at least 30% of the stand.</p> <p>c) Hayland is composed of 1 or 2 species from List A that makes up at least 60% of the stand.</p> <p>d) Hayland is composed of 3 or more species from List A that make up at least 60% of the stand.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
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<p>6.3 Select the choice that best describes your schedule for mowing hay. This question assesses the impact of hay mowing practices on wildlife. (Montana Note: the nesting date for Montana is April 15- August 1)</p> <p>a) The entire field is cut during the nesting season.</p> <p>b) Up to one half of the field is cut during the nesting season (with some areas excluded for wildlife) using wildlife friendly techniques (such as minimum mowing height, flushing bars, mowing toward the outside of the field, mow only during daylight).</p> <p>c) Hay cut after 75% of the nesting season is completed. (Montana Note: 75% of the nesting season is after July 1)</p> <p>d) Hay cut not more than once per year and is cut after 75% of the nesting season using wildlife-friendly harvest techniques.</p> <p>e) Hay cut not more than once per year and is cut after the nesting season.</p> <p>f) Hay cut occasionally, but not each year and is cut before or after the nesting season using wildlife-friendly harvest techniques.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F
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<p>7. Do you have any areas such as field borders, filter strips, buffers, odd areas, windbreaks, wetlands, brushy draws, hedgerows, seeps, shallow water areas, riparian areas, vegetated ditches, CRP land, native vegetated communities, center pivot corners or other similar areas that provide wildlife, pollinator and/or beneficial insect habitat within or adjacent to your cropland (orchards, hayland, vineyards, etc.)? You must own or control these areas.</p> <p>(Montana Note: Ineligible lands may be counted if they are adjacent to or within the offered acres. Example: older CSP contract has windbreak that is immediately adjacent to the offered acres. The offered acres benefit from the windbreak and may be counted here.)</p> <p>(Montana Note: Plants not suitable for wildlife food and cover are: annual grasses, smooth brome, Kentucky bluegrass, crested wheatgrass, cheat grass, garrison meadow creeping foxtail, timothy, reed canary grass and noxious weeds or invasive species.)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<p>7.1 Select the choice that best describes the plants growing on the areas that provide wildlife, pollinator and/or beneficial insect habitat within or adjacent to the crop/hay field.</p> <p>a) Less than 33% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects.</p> <p>b) 33-67% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects.</p> <p>c) More than 67% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C				

<p>7.2 Select the choice that best describe the AMOUNT of wildlife, pollinator and/or beneficial insect habitat within or adjacent to the crop/hay field</p> <p>a) Habitat is less than 1% of the crop/hay field. b) Habitat is between 1% and 5% of the crop/hay field. c) Habitat is between 6% and 10% of the crop/hay field. d) Habitat is more than 10% of the crop/hay field.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>7.3 Select the choice that best describes the average WIDTH of wildlife, pollinator and/or beneficial insect habitat within or adjacent to the crop/hay field.</p> <p>a) Less than 30 feet wide b) 30 to 75 feet wide. c) 76 to 120 feet wide. d) More than 120 feet wide.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>7.4 What is the average distance (ft.) from the center of the crop/hay field to the wildlife, pollinator and/or beneficial insect habitat?</p> <p>a) More than 1320 feet b) 660 to 1320 feet c) 330 to 659 feet d) Less than 330 feet</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D

<p>8. Do you intentionally leave unharvested crops in the field for wildlife food/cover on an annual basis? Choose the answer below (a-b) that best describes how much you leave.</p> <p>a) $\frac{1}{4}$ to less than or equal to 1 acre of food plot or unharvested grain per 40 acres of cropland (minimum 30 feet wide and next to noncrop cover).</p> <p>b) Greater than 1 acre of food plot or unharvested grain per 40 acres of cropland (minimum 30 feet wide and next to noncrop cover).</p> <p>(Montana Note: Does not include harvest “skips”)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> A <input type="checkbox"/> B	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> A <input type="checkbox"/> B
Water Conservation and Residue Management					
<p>9. Before field operations, do you check soil moisture by methods such as moisture-by-feel or more sophisticated methods to minimize soil compaction?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<p>10. Do you consistently use controlled traffic methods (either GPS or manual methods) to minimize soil compaction?</p> <p>(Montana Note: GPS equipment will be utilized to minimize soil compaction by staying in the same tracks year after year)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<p>11. Answer each residue management and/or tillage system question below:</p> <p>a) Enter the number of crops in your rotation that have full width tillage, deeper than 4 inches that involves soil inversion and lifting (such as plows or deep disking). This does not include fertilizer injectors.</p> <p>(Montana Note: Producers who burn their residues would select this option)</p>	<input style="width: 40px; height: 40px;" type="text"/>				

<p>b) Enter the number of crops in your rotation that have full width tillage, deeper than 4 inches that involves soil fracturing and lifting (such as subsoilers, rippers or paraplows). In orchards and vineyards, ignore alternate year cultivation in every other alleyway during the dry season to manage moisture competition.</p> <p>(Montana Note: This is a measure of ground disturbance. Examples include conventional fallow using toolbars with sweeps, rod weeders, undercutters (full surface tillage.)</p>	<input type="text"/>				
<p>c) Enter the number of crops in your rotation that have full width tillage performed after harvest and leaves more than 30% residue cover. In orchards and vineyards, ignore alternate year cultivation in every other alleyway during dry season to manage moisture competition. Does not include seedbed preparation immediately prior to planting of a cover crop.</p> <p>(Montana Note: Maintains residue at levels to maintain a minimum of 30% when planting the next crop. Example: continuous crop but fall tillage with full width surface tillage)</p>	<input type="text"/>				
<p>d) Enter the number of crops in your rotation for which you use conservation tillage (includes mulch tillage) and maintain greater 30% residue cover after planting. Residue cover includes crop residues, cover crops, composts or other natural mulch materials; do not include plastic.</p>	<input type="text"/>				

<p>(Montana Note: Examples include reduced till or mulch till systems where the producer manages residue to meet 30% requirement at planting.)</p> <p>e) Enter the number of crops in your rotation for which you use a no till system that maintains greater than 50% residue cover after planting. Residue cover includes crop residues, cover crops, composts or other natural mulch materials; do not include plastics.</p> <p>(Montana Note: 50% or more residue at planting using no-till or air drills with low disturbance openers. Also, no haying or grazing of crop aftermath.)</p> <p>f) Enter the number of crops in your rotation for which you use a no till system that maintains greater than 75% residue cover after planting. Residue cover includes crop residues, cover crops, composts or other natural mulch materials; do not include plastic. For systems using perennials with no tillage after year of establishment, include the number of years of perennials. For vineyards, orchards or other permanent crops, enter 1 here.</p> <p>(Montana Note: Includes no-till drills with disk openers on high residue crops. Also, no haying or grazing of crop aftermath.)</p>					
	<input type="text"/>				
	<input type="text"/>				

<p>12. Select the choice that best describes the average condition of crop residues left in the field during the winter for wildlife cover.</p> <p>a) Residue is removed or buried (i.e. fall tillage, undisturbed soybean residue or any kind of harvested silage).</p> <p>b) Crop residue chopped or shredded with no soil disturbance or grasses or legumes are included in the rotation and cover the field during winter.</p> <p>c) Crop residues are gleaned by livestock but no mechanical disturbance of residue or soils.</p> <p>d) Crop residue, grain stubble, hay/forage crop, or cover crop left standing overwinter. Height is less than 8 inches.</p> <p>e) Crop residue, grain stubble, hay/forage crop, or cover crop left standing overwinter. Height is greater than 8 inches.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E
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Erosion & Runoff Information					
<p>13. Is your cropland or hayland managed so there are no signs of erosion or gullies.</p> <p>(Montana Note: Only on offered acres.)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				

14. Select any of the following practices that are applied on your cropland or hayland acres:					
Contour farming (330)	<input type="checkbox"/>				
Contour orchard or other fruit area (331)					
Contour strip cropping (585)	<input type="checkbox"/>				
Windbreaks (380)	<input type="checkbox"/>				
Terraces (600)					
Diversions (362)	<input type="checkbox"/>				
Hillside ditch (423)					
Grassed waterways (412) for erosion stabilization and concentrated flow	<input type="checkbox"/>				
Grade stabilization structure (410)	<input type="checkbox"/>				
Rock barrier (555)					
Contour buffer strips (332)	<input type="checkbox"/>				
Herbaceous wind barriers (603)	<input type="checkbox"/>				
Cross wind trap strips (589C)	<input type="checkbox"/>				
<p>(Montana Note: Practice by rotation, must be on or adjacent to the offered acreage. Must meet the intent of the standard. Some practices are not available in Montana and are lined out.)</p>					

Nutrient Management Information					
16. Do you apply organic or inorganic nutrients on your cropland or hayland acres? This includes irrigation water, biosolids, organic by-products, and commercial fertilizers. A “No” answer for a rotation does not generate a negative response for that same rotation. (Montana Note: Includes cover crops and green manure crops)	<input type="checkbox"/> Yes <input type="checkbox"/> No				
16.1 Do you apply nutrients from organic sources?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
16.1.1 Are the organic sources analyzed to determine nutrient content, and heavy metal content, if sewage waste/sludge is a source?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
16.1.1a Consider the primary nutrient (i.e., N, P or K) contained in the organic source in the <u>LEAST</u> quantity, select the answer that best matches the planned rotation on your operation. a) The organic source applied <u>exceeds</u> this nutrient need on <u>all</u> the crops. b) The organic source applied <u>exceeds</u> this nutrient need on <u>some</u> of the crops c) The organic source applied <u>meets</u> this nutrient needs on <u>some</u> of the crops. d) The organic source applied <u>meets</u> this nutrient need on <u>all</u> of the crops.	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D

<p>16.1.1b Consider the primary nutrient (i.e., N, P or K) contained in the organic source in the <u>GREATEST</u> quantity, select the answer that best matches the planned rotation on your operation.</p> <p>a) The organic source applied <u>exceeds</u> this nutrient need on <u>all</u> the crops.</p> <p>b) The organic source applied <u>exceeds</u> this nutrient need on <u>some</u> of the crops</p> <p>c) The organic source applied <u>meets</u> this nutrient needs on <u>some</u> of the crops.</p> <p>d) The organic source applied <u>meets</u> this nutrient need on <u>all</u> of the crops.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>16.2 Do you soil test <u>ALL</u> crop and hayland fields (or tissue test for orchards, vineyards, or other permanent crops) following local land grant university guidance (e.g., annually, every 3 years, every 4 years, etc)?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<p>16.2.1 Consider the primary nutrient (i.e., N, P or K) needed the <u>MOST</u> for the planned crop rotation according to the soil test results, select the answer that best matches the planned rotation of your operation. The response should consider established crop yield records or state derived realistic crop yields in excess of the guidance/recommendations.</p> <p>a) The nutrient application rate applied <u>exceeds</u> the soil test recommendation on <u>all</u> the crops.</p> <p>b) The nutrient application rate applied <u>exceeds</u> the soil test recommendation on <u>some</u> of the crops.</p> <p>c) The nutrient application rate applied <u>meets</u> the soil test recommendation on <u>some</u> of the crops.</p> <p>d) The nutrient application rate applied <u>meets</u> the soil test recommendation on <u>all</u> of the crops.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D

<p>16.2.2 Consider the primary nutrient (i.e., N, P or K) needed the <u>LEAST</u> for the planned crop rotation according to the soil test results, select the answer that best matches the planned rotation of your operation. The response should consider established crop yield records or state derived realistic crop yields in excess of the guidance/recommendations.</p> <p>a) The nutrient application rate applied <u>exceeds</u> the soil test recommendation on <u>all</u> the crops.</p> <p>b) The nutrient application rate applied <u>exceeds</u> the soil test recommendation on <u>some</u> of the crops.</p> <p>c) The nutrient application rate applied <u>meets</u> the soil test recommendation on <u>some</u> of the crops.</p> <p>d) The nutrient application rate applied <u>meets</u> the soil test recommendation on <u>all</u> of the crops.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>16.3 Consider nutrients bound (i.e., residual nutrients) in manure, cover crops, previous crop residues, organic matter or irrigation water, select the answer that best matches the planned rotation on your operation</p> <p>a) Nutrients are not credited from <u>any</u> source to <u>any</u> crop.</p> <p>b) Nutrients are credited from <u>some</u> sources to <u>some</u> of the crops.</p> <p>c) Nutrients are credited from <u>some</u> sources to <u>all</u> of the crops.</p> <p>d) Nutrients are credited from <u>all</u> sources and to <u>all</u> crops.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>16.4 Consider the nitrogen needs of the crops in the rotation that follow a legume crop or legume cover crop, what <u>average percent</u> (enter response in decimal format) of the nitrogen needs are supplied by the legume crop or cover crop?</p>					

<p>16.5 Consider in-season nitrogen analysis management systems (e.g., GreenSeeker, SPAD meter, Adapt-N, PSNT, etc.), select the answer that best matches the planned rotation on your operation.</p> <p>a) Systems are not used for the planned rotation</p> <p>b) Systems are used 74% or less of the crops in the planned rotation.</p> <p>c) Systems are used on 75% or more of the crops in the planned rotation.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C				
<p>16.6 Select all that apply when you apply fertilizer or manure.</p> <p>a) Incorporate (within 24 hours) or inject manure or fertilizer at least 2 inches deep.</p> <p>b) Precision agriculture techniques are used in the application of fertilizer and manure.</p> <p>c) Apply on 80% residue cover or 80% crop canopy.</p> <p>d) None of the above</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>16.7 Select the answer that best describes when you apply the majority of nutrients</p> <p>a) Most of the manure or fertilizer is applied more than one month prior to planting or more than one month prior to “greenup” of perennial crops.</p> <p>b) Most of the manure or fertilizer is applied within one month prior to planting or within one month prior to “greenup” for perennial crops.</p> <p>c) Most of the manure or fertilizer is applied after crop emergence or after annual growth begins (greenup) for perennial crops.</p> <p>d) Most of the manure or fertilizer is applied as a split application (pre-plant & post plant), according to soil tests or crop growth stages. Application split must be at least 50% post emergence.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D

Salinity, Sodicty, and Irrigation Management

17. Do you have any salinity or sodicity (alkaline soils or seeps) concerns on your cropland or hayland? If “YES,” answer Questions 17.1 – 17.2	<input type="checkbox"/> Yes <input type="checkbox"/> No				
17.1 Consider methods to minimize subsurface water flow to saline seep areas, do you grow high water use crops or salt tolerant crops, or do you use cropping patterns to generate this effect?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
17.2 Do you manage nutrient application (type and rate) based on yield effects due to salinity?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
18. Do you irrigate cropland and/or hayland? If “YES,” answer Questions 18.1 – 18.5. NOTE: A “YES” answer includes wastewater application from on farm waste storage facilities.	<input type="checkbox"/> Yes <input type="checkbox"/> No				
18.1 Have you implemented an irrigation water management plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
18.2 Do you measure and record the amount of water you use to irrigate?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
18.3 Do you schedule your irrigations and the amount applied based on the monitoring of soil moisture and/or crop evapotranspiration?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
18.4 Has your irrigation system distribution uniformity been evaluated, and necessary changes made based on the test results?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
18.5 Do you irrigate areas where you have salinity concerns or that contribute (or may contribute) subsurface water flow to saline seeps. If “YES” answer 18.5.1	<input type="checkbox"/> Yes <input type="checkbox"/> No				

18.5.1 Do you manage irrigations based on your crop tolerance, and salinity levels in your soil and irrigation water?	<input type="checkbox"/> Yes				
	<input type="checkbox"/> No				

Montana's Conservation Measurement Tool

Pastureland Existing Activity Conservation Performance

(Montana Note: “Pasture” consists of tame grasses that have been seeded (i.e. crested wheatgrass or old CRP) AND that is managed separately from native range)

Questions					
Enter Pasture Species Mix #1 Name:					
Enter Pasture Species Mix #2 Name:					
Enter Pasture Species Mix #3 Name:					
Enter Pasture Species Mix #4 Name:					
Enter Pasture Species Mix #5 Name:					
Questions	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
1. Do you have an adequate grazing and roughage supply to meet forage demands of livestock and wildlife? Grass and hay for livestock and purchased hay are included in this answer. This includes where wildlife regularly consume forage in pastures.	<input type="checkbox"/> Yes <input type="checkbox"/> No				
2. SELECT ONE (a-c) Grazing Management level BELOW					
a) Forages are grazed below established minimum grazing heights.	<input type="checkbox"/> A				
b) Forages are grazed at or above established minimum grazing heights. Spot grazing occurs on 50% or more of the acres.	<input type="checkbox"/> B				
c) Forages are grazed at or above established minimum grazing heights. Spot grazing occurs on less than 50% of the acres.	<input type="checkbox"/> C				

<p>3. From the STATE Populated look up table and the choices below (a-d) select the one that best describes the mix of plants growing in your pasture. NOTE: functional group means warm season, cool season, forbs, legumes, annual etc. From the State Populated look up table-Select ‘Species Info’ button to view lists.</p> <p>a. One dominant perennial forage species.</p> <p>b. Two or more dominant forage species all from one functional group.</p> <p>c. Two or more dominant forage species representing two functional groups.</p> <p>d. Three or more dominant forage species representing at least two functional groups with at least one being a legume.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>4. From the STATE Populated look up table and the choice below (a-d) select the one that best describes the mix of plants growing in your pasture. From the State Populated look up table-Select ‘Species Info’ button to view lists.</p> <p>a) Pasture vegetation is composed of species from List B.</p> <p>b) Pasture vegetation is predominantly species from List B but one or more species from List A makes up at least 30% of the stand.</p> <p>c) Pasture vegetation is composed of 1 or 2 species from List A. that make up at least 60% of the stand.</p> <p>d) Pasture vegetation is composed of 3 or more species from List A that make up at least 60% of the stand.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D

<p>5. Do you have any areas such as field borders, filter strips, buffers, odd areas, windbreaks, wetlands, brushy draws, hedgerows, seeps, shallow water areas, riparian areas, center pivot corners, CRP land, or other similar areas that provide wildlife habitat within or adjacent to your pasture? You must own or control these areas.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<p>5.1 From the choices below (a-c) select the answer that best describes the plants growing on these areas within or adjacent to the pasture.</p> <p>a) Less than 33% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects</p> <p>b) 33-66% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects.</p> <p>c) More than 67% of the vegetation is native or introduced species that provided food and cover for wildlife, pollinators, and/or beneficial insects</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C				
<p>5.2 From the choices below select the answer that best describes the AMOUNT of suitable wildlife habitat within or adjacent to the pasture.</p> <p>a) Habitat less than 1% of the pasture.</p> <p>b) Habitat is between 1% and 5% of the pasture.</p> <p>c) Habitat is between 6% and 10% of the pasture.</p> <p>d) Habitat more than 10% of the pasture.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>5.3 From the choices below (a-d) select the answer that best describes the WIDTH of wildlife habitat within or adjacent to the pasture (must be at least 0.1 acre or more)</p> <p>a) less than 30 feet wide</p> <p>b) 30 to 75 feet wide</p>	<input type="checkbox"/> A <input type="checkbox"/> B				

<p>c) 76 to 120 feet wide</p> <p>d) more than 120 feet wide</p>	<input type="checkbox"/> C <input type="checkbox"/> D				
<p>5.4 How far is the wildlife habitat from the center of the pasture?</p> <p>a) Average distance from the center of the pasture to the habitat is more than 1320 feet</p> <p>b) Average distance from the center of the pasture to the habitat is 660 to 1320 feet</p> <p>c) Average distance from the center of the pasture to the habitat is 330 to 660 feet</p> <p>d) Average distance from the center of the pasture to the habitat is less than 330 feet</p>					
<p>Water Bodies, Erosion, & Runoff Information</p>					
<p>6. Do you manage access roads, stock trails and other critical areas to limit surface water runoff and control accelerated soil erosion? Gully erosion is stabilized.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<p>7. Are livestock concentration areas such as feeding, watering and mineral areas located away from water bodies or have buffers to protect the water bodies from unfiltered runoff? If there are no water bodies or water courses on or adjacent to your pastureland, select Yes.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				

Pest Management Information					
8. Do you apply any pesticides on your pastureland? A “No” answer for a forage management system acres does not generate a negative response for that same system.	<input type="checkbox"/> Yes <input type="checkbox"/> No				
8.1 Select the choice (a-c) below that best describes how you manage pests on your pastureland acres.					
a) Pesticides are applied to all forage management system acres <u>without</u> utilizing any pest prevention, avoidance, monitoring, or suppression (PAMS) strategies.	<input type="checkbox"/> A				
b) Pesticides are applied to <u>some</u> forage management system acres using a site-specific combination of <u>each</u> pest prevention, avoidance, monitoring, and suppression (PAMS) strategies, OR pesticides are applied to <u>all</u> forage management system acres using <u>only</u> one, two or three of the four PAMS strategies.	<input type="checkbox"/> B				
c) Pesticides are applied to all forage management system acres utilizing a site-specific combination of each pest prevention, avoidance, monitoring, and suppression (PAMS) strategies.	<input type="checkbox"/> C				
8.2 Do you use an environmental risk screening tool (such as WIN-PST or similar approved tool) to reduce pesticide risk to soil and water resources?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
Nutrient Management Information					
9. Do you apply organic or inorganic nutrients on your pastureland acres? This includes irrigation water, biosolids, organic by-products, and commercial fertilizers. A “No” answer for a forage management system does not generate a negative response for that same system.	<input type="checkbox"/> Yes <input type="checkbox"/> No				
9.1 Do you apply nutrients from organic sources?	<input type="checkbox"/> Yes <input type="checkbox"/> No				

<p>9.1.1 Are the organic sources analyzed to determine nutrient content, and heavy metal content, if sewage waste/sludge is a source?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				
<p>9.1.1a Consider the primary nutrient (i.e., N, P or K) contained in the organic source in the <u>LEAST</u> quantity, select the answer that best matches the forage management system on your operation.</p> <p>a. The organic source applied <u>exceeds</u> this nutrient need on <u>all</u> the forages.</p> <p>b. The organic source applied <u>exceeds</u> this nutrient need on <u>some</u> of the forages.</p> <p>c. The organic source applied <u>meets</u> this nutrient needs on <u>some</u> of the forages.</p> <p>d. The organic source applied <u>meets</u> this nutrient need on <u>all</u> of the forages.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>9.1.1b Consider the primary nutrient (i.e., N, P or K) contained in the organic source in the <u>GREATEST</u> quantity, select the answer that best matches the forage management system on your operation.</p> <p>a. The organic source applied <u>exceeds</u> this nutrient need on <u>all</u> the forages.</p> <p>b. The organic source applied <u>exceeds</u> this nutrient need on <u>some</u> of the forages.</p> <p>c. The organic source applied <u>meets</u> this nutrient needs on <u>some</u> of the forages.</p> <p>d. The organic source applied <u>meets</u> this nutrient need on <u>all</u> of the forages.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>9.2 Do you soil test <u>ALL</u> forage management system fields following local land grant university guidance (e.g., annually, every 3 years, every 4 years, etc)?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No				

<p>9.2.1 Consider the primary nutrient (i.e., N, P or K) needed the <u>MOST</u> for the forage management system according to the soil test results, select the answer that best matches the forage management system on your operation. The response should consider established yield records or state derived realistic yields in excess of the guidance/recommendations.</p> <p>a. The organic source applied <u>exceeds</u> this nutrient need on <u>all</u> the forages.</p> <p>b. The organic source applied <u>exceeds</u> this nutrient need on <u>some</u> of the forages.</p> <p>c. The organic source applied <u>meets</u> this nutrient needs on <u>some</u> of the forages.</p> <p>d. The organic source applied <u>meets</u> this nutrient need on <u>all</u> of the forages.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>9.2.2 Consider the primary nutrient (i.e., N, P or K) need the <u>LEAST</u> for the forage management system according to the soil test results, select the answer that best matches the forage management system on your operation. The response should consider established yield records or state derived realistic yields in excess of the guidance/recommendations.</p> <p>a. The organic source applied <u>exceeds</u> this nutrient need on <u>all</u> the forages.</p> <p>b. The organic source applied <u>exceeds</u> this nutrient need on <u>some</u> of the forages.</p> <p>c. The organic source applied <u>meets</u> this nutrient needs on <u>some</u> of the forages.</p> <p>d. The organic source applied <u>meets</u> this nutrient need on <u>all</u> of the forages.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D

<p>9.3 Consider nutrients bound (i.e., residual nutrients) in manure, supplemental feed, organic matter or irrigation water, select the answer that best matches the forage management system on your operation.</p> <p>a) Nutrients are not credited from <u>any</u> source to <u>any</u> forage.</p> <p>b) Nutrients are credited from <u>some</u> sources to <u>some</u> of the forages.</p> <p>c) Nutrients are credited from <u>some</u> sources to <u>all</u> of the forages.</p> <p>d) Nutrients are credited from <u>all</u> sources and to <u>all</u> forages.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>9.4 Select all that apply to your methods of application of fertilizer or manure.</p> <p>a) Inject manure or fertilizer at least 2 inches deep</p> <p>b) Precision agriculture techniques are used in the application of fertilizer and manure.</p> <p>c) Apply on 80% surface cover with at least the minimum grazing heights.</p> <p>d) None of the above</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>9.5 From choices below (a-b), select the answer that best describes when you apply the majority of nutrients.</p> <p>a. Most of the fertilizer or manure is applied at the beginning of the growing season as a top-dress.</p> <p>b. Most of the fertilizer or manure is split applied; usually an initial application of 50% or less at the start of the growing season and then applied as needed after one or more grazing events during the year except following the last one of the growing season.</p>	<input type="checkbox"/> A <input type="checkbox"/> B				

Salinity, Sodicity, and Irrigation Management					
10. Do you have any Salinity or Sodicity (alkaline soils or seeps) concerns on your pastureland? If “YES,” answer Questions 10.1 – 10.2	<input type="checkbox"/> Yes <input type="checkbox"/> No				
10.1 Consider methods to minimize subsurface water flow to saline seep areas, do you grow high water use forages or salt tolerant forages?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
10.2 Do you manage nutrient application (type and rate) based on yield effects due to salinity?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
11. Do you irrigate pastureland? If “YES,” answer Questions 11.1 – 11.5. NOTE: a “YES” answer includes wastewater application from on farm waste storage facilities.	<input type="checkbox"/> Yes <input type="checkbox"/> No				
11.1 Have you implemented an irrigation water management plan?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
11.2 Do you measure and record the amount of water you use to irrigate?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
11.3 Do you schedule your irrigations and the amount applied based on the monitoring of soil moisture and/or forage evapotranspiration?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
11.4 Has your irrigation system distribution uniformity been evaluated, and necessary changes made based on the test results?	<input type="checkbox"/> Yes <input type="checkbox"/> No				
11.5 Do you irrigate areas where you have salinity concerns or that contribute (or may contribute) subsurface water flow to saline seeps. If “YES” answer 11.5.1	<input type="checkbox"/> Yes <input type="checkbox"/> No				
11.5.1 Do you manage irrigations based on your forage tolerance, and salinity levels in your soil and irrigation water?	<input type="checkbox"/> Yes <input type="checkbox"/> No				

Montana's Conservation Measurement Tool

Rangeland Existing Activity Conservation Performance

(Montana Note: Rangeland consists of native species and has never been broken or sodbusted that is managed as grazing land.)

Questions	Response
<p>1. Do you have an adequate grazing and roughage supply to meet forage demands of livestock and wildlife? Grass and hay for livestock and purchased hay are included in this answer. This includes where wildlife regularly consume forage in pastures.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>2. CHOOSE ONE (a-d) Grazing Management level BELOW</p> <p>a) Rangeland is heavily grazed (more than 65% use).</p> <p>b) Stocking rates are managed to achieve proper forage utilization. Rangeland is moderately grazed (35-65% use) with even grazing distribution.</p> <p>c) Stocking rates are managed to achieve proper forage utilization. Rangeland is moderately grazed (35-65% use) with some ungrazed or lightly grazed patches.</p> <p>d) Rangeland is lightly grazed (less than 35% use) with numerous ungrazed areas creating a patchy appearance.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>3. From the choices below (a-d) select the one that best describes the mix of plants growing on your rangeland.</p> <p>a) Rangeland acres are predominantly occupied by non-native plant species. Native plants have mostly been replaced due to invasion, grazing pressure or seeding to non-native species.</p> <p>b) Number and kinds of plant species represent less than 1/3 of the potential native plant community for the natural site. Plants that increase under grazing pressure (e.g., "increasers") are abundant.</p> <p>c) Number and kinds of plant species on site is between 1/3 and 2/3rds of the number and kinds of plants typically expected for the natural site.</p> <p>d) Number and kinds of plant species onsite represent more than 2/3rds of the number/kinds of plant species</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D

<p>typical of natural site conditions. Plants that decrease under grazing pressure (i.e., "decreasers") are still abundant.</p>	
<p>4. Do you have watering facilities such as tanks, troughs, etc.?</p> <p>How many of your Watering Facilities (tanks, troughs, etc.) provide safe access and escape for wildlife, provide water during the frost free parts of the year and are free of hazards for aerial drinking wildlife (bats, swallows, etc.)</p> <p>a) Less than 25%</p> <p>b) 25 to 50%</p> <p>c) 51 to 75%</p> <p>d) More than 75%</p> <p>(Montana Note: Include only open tanks. Exclude closed, winter tanks. If % is zero, then choose (a)).</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D</p>
<p>5. Do you apply any brush management?</p> <p>From the choices below (a-c) select the answer that best describes how brush is managed on your rangeland. Noxious and/or invasive woody species such as Russian Olive and Saltcedar may be totally removed, if possible.</p> <p>a) Woody species are not managed for wildlife. There is an evident browse line; or, brush is totally eliminated with brush management measures.</p> <p>b) Woody species are managed so that populations are only partially eliminated with brush management measures. There is absence of a browse line, although hedging on key browse plants may be observed.</p> <p>c) Woody species are managed so that populations are only partially eliminated with brush management measures. Brush management is done in patterns and amounts developed with wildlife considerations.</p>	<p><input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p><input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C</p>

<p>6. Do you have any fences constructed with considerations for wildlife species and their movements?</p> <p>How much of your fencing meets state wildlife agency or NRCS standards with considerations for wildlife species and their movements?</p> <p>a) less than 25%</p> <p>b) 25 to 50%</p> <p>c) 51 to 75%</p> <p>d) more than 75%</p> <p>(Montana Note: include basic specs of a wildlife friendly fence; i.e. wire height, spacing... if % is zero, choose (a))</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
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<p>Water Bodies, Erosion, & Runoff Information</p>	
<p>7. Do you manage access roads, stock trails and other critical areas to limit surface water runoff and control accelerated soil erosion? Gully erosion is stabilized.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>8. Are livestock concentration areas such as feeding, watering and mineral areas are located away from water bodies and water courses or have buffers to protect the water bodies and water courses from unfiltered runoff? If there are no water bodies or water courses on or adjacent to your rangeland, select Yes.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>Pest Management Information</p>	
<p>9. Do you apply any pesticides on your rangeland acres? A “No” answer does not generate a negative response.</p> <p>(Montana Note: Pesticides include herbicides, insecticides, fungicides, etc.)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No

<p>9.1 Select the choice (a-c) below that best describes how you manage pests on your rangeland acres.</p> <p>a) Pesticides are applied to all rangeland acres <u>without</u> utilizing any pest prevention, avoidance, monitoring, or suppression (PAMS) strategies.</p> <p>b) Pesticides are applied to <u>some</u> rangeland acres using a site-specific combination or <u>each</u> pest prevention, avoidance, monitoring, and suppression (PAMS) strategies, OR pesticides are applied to <u>all</u> rangeland acres using <u>only</u> one, two or three of the four PAMS strategies.</p> <p>c) Pesticides are applied to all rangeland acres utilizing a site-specific combination of each pest prevention, avoidance, monitoring, and suppression (PAMS) strategies</p>	<p><input type="checkbox"/> A</p> <p><input type="checkbox"/> B</p> <p><input type="checkbox"/> C</p>
<p>9.2 Do you use an environmental risk screening tool (such as WINPST or similar approved tool) to reduce pesticide risk to soil and water resources?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
<p>Salinity and Sodicty Management</p>	
<p>10. Do you have any Salinity or Sodicty (alkaline soils or seeps) concerns on your rangeland acres?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
<p>10.1 Do you manage saline seeps discharge areas to maintain and/or improve existing salt tolerant vegetation?</p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>

Montana's Conservation Measurement Tool

Ag Land – Water Bodies/Water Courses Existing Activity Conservation Performance

Questions	Response
<p>1. Do you have any WATER BODIES (lakes, ponds or wetlands) on or adjacent to your property? Wetlands farmed under natural conditions or farmed wetlands do not fit under this category.</p> <p>(Montana Note: Does not include temporary and seasonal wetlands)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>2. Consider all the lakes/ponds/wetlands on your property. What percentage of the total boundary of these areas has at least a 33-foot wide zone of diverse vegetation that is native to the site or introduced species that have become naturalized between the edge of the waterbody and adjacent land? This could be an established filter strip or other riparian buffer.</p> <p>a) Less than 25% b) 25% to 50% c) 51% to 75% d) More than 75%</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D
<p>3. Does upland runoff (surface or groundwater) empty directly – without filtration through a vegetated buffer – into any of the lakes/ponds/wetlands on your property?</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>4. Do you have any WATER COURSES (ditches, sinkholes, intermittent or perennial streams, or rivers) on or adjacent to your property?</p> <p>(Montana Note: Includes irrigation ditches, canals and drains)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>5. Do you pump (directly or indirectly) or divert water from a river or stream? If “Yes”, select appropriate choice below.</p> <p>a) Water withdrawal completely dewater stream habitat. b) Water withdrawal diminishes streamflow; diversions or pumps are unscreened (for aquatic animals). c) Water withdrawal diminishes streamflow; diversions or pumps are screened (for aquatic animals). d) None of the above.</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D

<p>6. Do you have instream structures on your property, such as diversion dams, road crossings (bridges or culverts), low-water crossings, and pumping stations. If “YES”, select appropriate choice below.</p> <p>a) Structure blocks aquatic organisms from passing upstream or downstream during all or part of the year. b) Structure could block aquatic organisms from passing upstream or downstream part or all of the year. c) Structure does not block aquatic organisms from passing upstream at any time of the year.</p> <p>(Montana Note: Includes any dam or irrigation structure on a live stream)</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
<p>7. Considering all water courses on your property, select the choice below that best describes 90% of their total length. These areas could be established filter strips or other riparian buffers. (Montana Note: Includes irrigation ditches, canals and drains)</p> <p>a) The water course has little or no vegetated riparian area. Agricultural activities take place adjacent to the streambank within the state specified minimum distance for a water quality buffer. b) The water course is well vegetated. The width of the vegetation meets state minimum buffer width for water quality protection. c) The water course is well vegetated. The width exceeds state minimum buffer width for water quality protection AND is at least 33 feet wide or 2.5 times as wide as the stream channel (up to a maximum of 100 feet for large streams).</p> <p>(Montana Note: Minimum buffer widths for Montana are: Field borders must be 30 feet, Riparian Forest Buffer must be 35 feet and Riparian Herbaceous Buffers must be 35 feet)</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
<p>8. Consider all water courses on your property and select the choice below which best describes your situation. Select the condition that best describes the species composition for 90% of the total length of the water courses on your property.</p> <p>a) Existing vegetation is dominated by a single species and is primarily non-native and may include invasive species. b) Existing vegetation is diverse and is primarily non-native to the site. Invasive species are not present. c) Existing vegetation is diverse and is predominately native to the site.</p>	<input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C

9. Do you maintain a minimum setback of 33 feet or greater when applying manure or pesticides from all intermittent streams/ditches, perennial streams, ponds/lakes, surface water inlets and open sink holes? Spot spraying within the setback is permitted according to the pesticide label.

- Yes
- No

(Montana Note: Must be able to answer 100% to answer 'Yes' to this question.)