

# CONSERVATION STEWARDSHIP PROGRAM RANKING TOOL

Date:

Prepared By:

Enter Producer Name:

Enter Farm/Tract Number:

Enter State:

**1. Complete information for each landuse you have on your operation.**

**Cropland or Hayland**

Enter Each Rotation Name Below (up to five rotations)

Enter Rotation  
Acres Below

**Pasture**

Enter Each Pasture Species Mix Name Below (up to five mixtures)

Enter Mixture  
Acres Below

**Rangeland**

Enter Acres of Rangeland:

**Forest Land**

Enter Acres of Forest Land:

<b>2. Do you have unpaved farm roads used by farm vehicles 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?</b>	
<b>If yes, check any of the following methods you regularly use to control dust.</b>	
Regularly spraying water to reduce the dust	<input type="checkbox"/> Yes
Apply biodegradable oils to reduce the dust	<input type="checkbox"/> Yes
Gravel surfacing	<input type="checkbox"/> Yes
Apply other environmentally benign dust control chemicals	<input type="checkbox"/> Yes

	crop or hay	pasture	range
<b>3. Check if you have water bodies (ponds, lakes, or wetlands) or water courses (streams, rivers or ditches) on the indicated land use. If Yes for any landuse, then must complete the questions for Water Bodies/Water Courses.</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes

<b>4. Check each energy conservation reduction method used on your farm:</b>	
High efficiency electric motors installed on the farm in the last 3 years	<input type="checkbox"/> Yes
Alternative energy sources (solar, wind, biofuels, etc.) Does not include E15 Ethanol or B15 or B20 biodiesel	<input type="checkbox"/> Yes
Conversion of grain drying equipment to high energy efficient system.	<input type="checkbox"/> Yes
Energy audit conducted on farm and now implementing energy audit actions	<input type="checkbox"/> Yes
High efficiency pumping plants installed within last 3 years or recognized through pumping plant evaluation	<input type="checkbox"/> Yes

<b>5. Do you have any orchards on your farm?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
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<b>6. Do you have a drainage system (subsurface or surface) installed on your cropland?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
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<b>7. Do you have any farmed wetlands on your cropland?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
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<b>8. Do you have any existing buffers or filter strips on your farm?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
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<b>9. Do you pump water for livestock, irrigation, or drainage?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
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<b>10. Do you have any livestock watering facilities such as troughs or tanks?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
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**11. Other Lands:**  
Includes farm headquarters, machinery storage areas, material handling facilities, feedlots, manure storage facilities and other such developed areas on the farm or ranch. All of the 'Other Lands' in your operation must meet the following condition for stewardship eligibility to be met.

<b>Do you have any 'Other Lands' that have any readily observable erosion or point sources of contamination such as gullies, manure runoff or pesticide runoff?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No
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# Crop and Hayland Benchmark Ranking Questions

## Rotation and Adjacent Habitat Information

- 1 Enter the length of your rotation 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 -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.
- 2 Based on your rotation, enter the number of your harvested crops that are included in each residue category (a-e). These questions have crops 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 3d. For a corn and soybean rotation, enter "1" in 3c (for beans) and "1" in 3d (for corn).
- a) Enter the number of years in your rotation that include the following conditions: bare fallow crop periods (both chemical and tilled fallow), idle bare fields, or harvested sod. Sod harvested for turf is differentiated from hay (which is listed under 3e). For fallow that is not bare, consider an entry for cover crop does not have to be planted, can be volunteer.
- b) Enter the number of harvested crops in your rotation that are included in the list below (or are similar to the list below if not listed): Artichokes, Asparagus, Beans dry edible, Bedding/garden plants, Beets, Broccoli, Brussels sprouts, Bulbs/corms/rhizomes/tubers-dry, Cabbage, Carrots, Cauliflower, Celery, Cilantro, Collards, Cucumbers, Daikon, Dill for oil, Eggplant, Endive, Escarole, Fava beans, Flower seeds, Flowers cut and cut florist greens, Foliage plants, Garlic, Ginger root, Ginseng, Green peas, Greens, Horseradish, Kale, Lettuce, Lima beans, Melons, Mustard greens, Nursery crops, Okra, Onions, Parsley, Peppers, Pimientos, Potted flowering plants, Pumpkins, Radishes, Rapini, Rutabagas, Shallots, Snap beans, Spinach, Squash, Strawberries, Tomatoes, Turnips, Vegetables, Watercress, or similar crops.
- c) Enter the number of harvested crops in your rotation that are included in the list below (or are similar to the list below if not listed): Buckwheat, Canola, Castor beans, Chicory, Coffee, Corn dry fodder hogged or grazed, Corn silage, Cotton, Flaxseed, Guar, Hops, Lentils, Mungbeans, Mustard seed, Pea Type Crops, Peanuts, Pineapples, Potatoes, Safflower, Sage, Soybeans, Sugarbeets, Sunflower, Sweet potatoes, Tobacco, are grown during your rotation.
- d) Enter the number of harvested crops in your rotation that are included in the list below (or are similar to the list below if not listed): Amaranth, Apricots, Berry Crops (Trees and Shrubs), Chufas, Corn Grain/Popcorn, Crambe, Cranberries, Desert grass, Fruit Trees, Grapes, Guava, Herbs, perennial, Kenaf, Maple trees for syrup, Mint all for oil, Mushrooms, Nut Trees, Peppermint for oil, Pine tree, Rapeseed, Rice, Sesame, Small Grains, Sorghum all, Sugarcane, Teff, Temples, or similar crops.
- e) Enter the number of harvested crops in your rotation that are included in the list below or included in the comments (or are similar to the list below if not listed): Dichondra, Grass Hay/Seed, Legume Hay /Seed, Lotus root, or similar herbaceous perennial crops. This does not include grass harvested for sod.
- 3 How often do you plant a cover crop that you do not harvest? OR How often do you maintain vegetation between the rows in areas such as vineyards or orchards?
- 4 Enter the number of different crop species/types in your rotation, including different types of cover crops. Include 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.
- 5 Do you have cropland acres that you flood during the dormant season for wetland wildlife? If  Yes  No
- 5.1 From choices below (a-e) select the answer that best describes the number of consecutive days that your cropland is normally (at least 6 out of 10 years) flooded.
- a) Less than 2 months per year with dependable artificial water or precipitation driven flooding.  Yes
- b) 2 or more months per year with dependable artificial water or precipitation driven flooding on heavy clay soils (Hydrologic group C or D).  Yes
- c) 3 or more months per year with dependable artificial water or precipitation driven flooding on heavy clay soils (Hydrologic group C or D)  Yes
- d) 4 or more months per year with dependable artificial water or precipitation driven flooding on heavy clay soils (Hydrologic group C or D).  Yes
- e) More than 4 months per year with dependable artificial water or precipitation driven flooding on heavy clay soils (Hydrologic group C or D).  Yes

- 5.2 **Select how often fields are flooded when crops are not growing. At least one third of the field must be flooded to qualify.**
- a) **Less than 2 out of 3 years.**  Yes
- b) **2 out of 3 years.**  Yes
- c) **Annual flooding.**  Yes
- 5.3 **From the choices below (a-d) select the choice that best describes how much of your fields are normally flooded.**
- a) **Less than 33% of the field**  Yes
- b) **34 - 50% of the field**  Yes
- c) **51 - 75% of the field**  Yes
- d) **Greater than 75% of the field**  Yes
- 6 **Does your rotation, orchard or vineyard include hay or other grass or legume cover? If "NO", skip to Question 7.**  Yes  
 No
- 6.1 **How many years of hay 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.**
- 6.2 **From the choices below (a-d) select the one that best describes the mix of plants you are growing for hay. FROM STATE populated look up table -dominant**
- a) **Hayland is composed of species from List B.**  Yes
- b) **Hayland is composed of 1 species from List A.**  Yes
- c) **Hayland is composed of 2 species from List A.**  Yes
- d) **Hayland is composed of 3 or more species from List A.**  Yes
- 6.3 **From the choices below (a-f) select the one that best describes your schedule for mowing hay.**
- a) **The entire field is cut during the nesting season**  Yes
- b) **Not more than half of the field is cut during the nesting season (with some areas excluded for wildlife) using wildlife friendly techniques (e.g., minimum mowing height, reduced cutting speed, flushing bars, mowing toward the outside of the field, mow only during daylight).**  Yes
- c) **Hay cut after 75% of the nesting season is completed.**  Yes
- d) **Hay cut not more than once per year and is cut after 75% of the nesting season using wildlife-friendly harvest techniques.**  Yes
- e) **Hay cut not more than once per year and is cut after the nesting season.**  Yes
- f) **Hay cut occasionally, but not each year and is cut before or after the nesting season using wildlife-friendly harvest techniques.**  Yes
- Do you have any areas such as field borders, odd areas, windbreaks, wetlands, brushy draws, hedgerows, seeps, riparian areas, vegetated ditches, native vegetated communities, center pivot corners or other similar areas that provide wildlife habitat within or adjacent to your cropland (orchards, hayland, vineyards, etc.)? You must own or control these areas.**  Yes  
 No
- 7 **If "NO", skip to Question 8.**
- 7.1 **From the choices below (a-d) select the answer that best describes the plants growing on these areas within or adjacent to the crop/hay field.**
- a) **Vegetative cover is 75% or more plant species that do not provide suitable wildlife food and cover.**  Yes
- b) **Vegetative cover is 50% or more introduced plant species.**  Yes
- c) **Vegetative cover is 50% or more either native vegetation or introduced species with high wildlife value.**  Yes
- d) **The plant cover is all native vegetation (e.g., warm season grasses, cool season grasses, forbs, shrubs, and/or trees).**  Yes

- 7.2 From the choices below (a-d) select the answer that best describes the **AMOUNT** of suitable wildlife habitat within or adjacent to the crop/hay field.
- a) Habitat is **less than 1%** of the crop/hay field.  Yes
  - b) Habitat is between **1% and 5%** of the crop/hay field.  Yes
  - c) Habitat is between **5 and 10 %** of the crop/hay field.  Yes
  - d) Habitat is more than **10%** of the crop/hay field.  Yes
- 7.3 From the choices below (a-d) select the answer that best describes the **WIDTH** of wildlife habitat within or adjacent to the crop/hay field (must be at least 0.1 acre or more)
- a) **less than 30** feet wide  Yes
  - b) **30 to 75** feet wide  Yes
  - c) **76 to 120** feet wide  Yes
  - d) **more than 120** feet wide  Yes
- 7.4 How far is the wildlife habitat from the center of the crop/hay field?
- a) Average distance from the center of the field to the habitat is **more than 1320 feet**  Yes
  - b) Average distance from the center of the field to the habitat is **660 to 1320 feet**  Yes
  - c) Average distance from the center of the field to the habitat is **330 to 660 feet**  Yes
  - d) Average distance from the center of the field to the habitat is less than **330 feet**  Yes
- 8 Do you purposely leave unharvested crops in the field for wildlife food? - If "YES", choose the answer below (a-d) that best describes how much you leave. If "NO", skip to question 9.
- a) **1/4 – <1 acre of food plot or unharvested grain per 40 acres** of cropland (minimum 30 feet wide and next to noncrop cover).  Yes
  - b) **> 1 acre of food plot or unharvested grain per 40 acres** of cropland (minimum 30 feet wide and next to noncrop cover).  Yes
  - c) **Winter cover crop or hay/forage crop is 50 - 75% of field.**  Yes
  - d) **Winter cover crop or hay/forage crop is more than 75% of field.**  Yes

### Water Conservation and Residue Management

- 9 Before field operations, do you check soil moisture to minimize soil compaction?  Yes
- 10 Do you consistently use controlled traffic methods to minimize soil compaction?  Yes
- 11 Answer each of the questions below (a-f) about your residue management and/or tillage system:
- a) Enter the number of crops in your rotation that have **full width spring tillage, deeper than 4 inches**. This includes any such tillage that occurs less than 60 days before planting (regardless of season). This does not include fertilizer injectors, in-row subsoilers or cover crops.
  - b) Enter the number of crops in your rotation that have **full width tillage, deeper than 4 inches performed after harvest and leaves less than 30% residue cover**. This includes any such tillage occurring more than 60 days before to the normal or next planting date (regardless of season). 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.
  - c) Enter the number of crops in your rotation that have **full width tillage, deeper than 4 inches performed after harvest and leaves more than 30% residue cover**. This includes any such tillage occurring more than 60 days before the normal or next planting date (regardless of season). 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.
  - d) Enter the number of crops in your rotation that have **full width tillage but maintains at least 30-49% soil cover after planting (mulch tillage)**. This includes crop residues, cover crops, composts or other natural mulch materials but does not include plastic.
  - e) Enter the number of crops in your rotation that you establish using a conservation tillage system that **maintains 50% to 75% residue cover after planting**.
  - f) Enter the number of crops in your rotation that you establish using a conservation tillage system that **maintains 75% or more residue cover after planting**.

- 12 From the choices below (a-e) select the answer that best describes the average condition of crop residues left in the field during the winter. If none of these apply do not answer.
- a. Undisturbed soybean residue or any kind of silage harvested  Yes
  - 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.  Yes
  - c. Crop residues are gleaned by livestock but no mechanical disturbance of residue or soils.  Yes
  - d. Crop residue, grain stubble, hay/forage crop, or cover crop left standing overwinter. Height is less than 8 inches.  Yes
  - e. Crop residue, grain stubble, hay/forage crop, or cover crop left standing overwinter. Height is greater than 8 inches.  Yes

### Erosion, & Runoff Information

- 13 CHECK if your crop or hayland is managed so there are no signs of erosion or gullies after a heavy rainfall of 2 inches in 24 hours.  Yes
- 14 Check any of the following practices that are applied on your crop or hayland acres:
- crop rotation with high residue crops  Yes
  - residue management practices  Yes
  - cover crops  Yes
  - covered alleyways in orchards or vineyards  Yes
  - contour farming  Yes
  - contour strip cropping  Yes
  - windbreaks  Yes
  - terraces  Yes
  - grassed waterways  Yes
  - contour buffer strips  Yes
  - herbaceous wind barriers  Yes
  - cross trap strips  Yes

### Pest Management Information

- 15 Do you apply any pesticides on your crop or hayland acres?  
If "NO", skip to Question 16.  Yes  
 No
- 15.1 From the questions below select the choice (a-c) that best describes how you manage pests on your crop or hayland acres.
- a) CHECK if you apply pesticides without using an **Integrated Pest Management (IPM) system**.  Yes
  - b) CHECK if you use some **components of an IPM system** such as using pest-free seeds and transplants, cleaning tillage and harvesting equipment between fields, using pest-resistant varieties, crop rotation, trap crops, pest scouting, biological pest controls, and scheduling irrigation to avoid disease development.  Yes
  - c) CHECK if you use a **full IPM system** with scouting and economic thresholds to manage pests and reduce pest management environmental risk, utilizing pest suppression techniques (including pesticide applications) only after monitoring (including pest scouting) verifies that a pest population has reached an economic threshold.  Yes
- 15.2 CHECK if you use an **environmental risk screening tool (such as WIN-PST or similar)** to reduce pesticide risk to soil and water resources.  Yes

## Nutrient Management Information

- 16 Do you apply any fertilizers or manure on your crop or hayland acres?  
If "NO", skip to Question 17.  Yes  
 No
- 16.1 CHECK if manure, compost, or other organic amendment is applied to meet (but not exceed) crop nutrient needs.  Yes
- 16.2 CHECK if you soil test (or tissue test for orchards, vineyards, or other permanent crops) on all crop and hayland fields at least once every 5 years AND you use the test results to plan your nutrient application rates.  Yes
- 16.3 CHECK if you apply fertilizers and manures based on established or realistic crop yields from crop records and you give appropriate credit for nutrients from manure, cover crops, irrigation water, previous crops, or organic matter, as applicable, by using analysis or book values for these sources to plan nutrient application rates and timing.  Yes
- 16.4 Check all that apply when you apply fertilizer or manure.
- a) incorporate or inject manure or fertilizer at least 2 inches deep  Yes
  - b) precision agriculture techniques are used in the application of fertilizer and manure.  Yes
  - c) apply on 80% residue cover or 80% crop canopy.  Yes
- 16.5 From choices below (a-d) select the answer that best describes when you apply the majority of nutrients.
- 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.  Yes
  - 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.  Yes
  - c) Most of the manure or fertilizer is applied **after crop** emergence or **after annual growth begins** (greenup) for perennial crops.  Yes
  - 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.  Yes

## Salinity, Sodicity, and Irrigation Management

- 17 Do you have any Salinity or Sodicity (alkaline soils or seeps) concerns on your crop or hayland acres?  
If "NO", skip to Question 18.  Yes  
 No
- 17.1 CHECK if you have identified saline recharge or discharge areas on your crop or hayland acres.  Yes
- 17.2 CHECK if you manage saline seeps by using high water use, salt tolerant crops or cropping pattern to manage or minimize salinity in the soil, surface water, and/or ground water.  Yes
- 17.3 CHECK if you manage the type and rate of soil fertility amendments and irrigation based on your soil and irrigation chemistry for your saline or sodic soils.  Yes
- 18 Do you use irrigation on the cropping (or hayland) system? **If**  Yes  
"YES", answer Questions 18.1 - 18.3.  No
- 18.1 Do you measure the amount of water you use to irrigate?  Yes
- 18.2 Do you schedule your irrigations with some form of soil moisture or evapotranspiration monitoring?  Yes
- 18.3 Has your system been tested to measure distribution uniformity and changes made based on the results of the tests?  Yes

# Pastureland Benchmark Ranking Questions

- 1 **CHECK if you have an adequate grazing and roughage supply to meet livestock demands.**  Yes
- 2 **CHOOSE ONE (a-c) Grazing Management level BELOW**
- a) Forages are grazed below established minimum grazing heights.  Yes
- b) Forages are grazed at or above established minimum grazing heights. Spot grazing occurs on 50% or more of the acres.  Yes
- c) Forages are grazed at or above established minimum grazing heights. Spot grazing occurs on less than 50% of the acres.  Yes
- 3 **From the choices below (a-d) select the one that best describes the mix of plants growing in your pasture. FROM STATE populated look up table**
- a) One dominant perennial forage species.  Yes
- b) Two or more dominant forage species all from one functional group.  Yes
- c) Two or more dominant forage species representing two functional groups.  Yes
- d) Three or more dominant forage species representing at least two functional groups with at least one being a legume.  Yes
- 4 **From the choices below (a-d) select the one that best describes the mix of plants growing in your pasture. FROM STATE populated look up table**
- a) Pasture vegetation is composed of **species from List B.**  Yes
- b) Pasture vegetation is composed of **species from List B plus one legume.**  Yes
- c) Pasture vegetation is composed of a **mixture of 2 species from List A.**  Yes
- d) Pasture vegetation is composed of **more than 3 species from List A.**  Yes
- 5 **Do you have any areas such as field borders, odd areas, windbreaks, wetlands, brushy draws, hedgerows, seeps, 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. If "NO", skip to Question 6.**  Yes  No
- 5.1 **From the choices below (a-d) select the answer that best describes the plants growing on these areas within or adjacent to the pasture.**
- a) Vegetative cover is **75% or more plant species that do not provide suitable wildlife food and cover.**  Yes
- b) Vegetative cover is **50% or more introduced plant species.**  Yes
- c) Vegetative cover is **50% or more either native vegetation or introduced species with high wildlife value.**  Yes
- d) The plant cover is **all native vegetation** (e.g., warm season grasses, cool season grasses, forbs, shrubs, and/or trees).  Yes
- 5.2 **From the choices below select the answer that best describes the AMOUNT of suitable wildlife habitat within or adjacent to the pasture.**
- a) Habitat less than **1%** of the pasture.  Yes
- b) Habitat is between **1% and 5%** of the pasture.  Yes
- c) Habitat is between **5 and 10 %** of the pasture.  Yes
- d) Habitat more than **10%** of the pasture.  Yes
- 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)**
- a) less than **30 feet** wide  Yes
- b) **30 to 75 feet** wide  Yes
- c) **76 to 120 feet** wide  Yes
- d) more than **120 feet** wide  Yes
- 5.4 **How far is the wildlife habitat from the center of the pasture?**
- a) Average distance from the center of the pasture to the habitat is **more than 1320 feet**  Yes
- b) Average distance from the center of the pasture to the habitat is **660 to 1320 feet**  Yes
- c) Average distance from the center of the pasture to the habitat is **330 to 660 feet**  Yes
- d) Average distance from the center of the pasture to the habitat is less than **330 feet**  Yes

- 6 CHECK if access roads, stock trails and other critical areas are managed to limit surface water runoff and control accelerated soil erosion. Gully erosion is stabilized.  Yes
- 7 CHECK if livestock concentration areas such as feeding, watering and mineral areas are located away from water bodies or have buffers to protect the water bodies from unfiltered runoff.  Yes

### Pest Management Information

- 8 Do you apply any pesticides on your pastureland acres?  
If "NO", skip to Question 9.  Yes  
 No
- 8.1 From the questions below select the choice (a-c) that best describes how you manage pests on your pasture.
- a) CHECK if you apply any pesticides with no Integrated Pest Management (IPM) system.  Yes
- b) CHECK if you use some components of an IPM system such as using pest-free seeds and transplants, feeding hay without any noxious weed seeds, scheduling irrigation to avoid situations conducive to disease development, using pest-resistant varieties, spot spraying, individual plant treatment, banding, directed spraying, hand hoeing, select non-invasive forage species, pest scouting, and biological pest controls.  Yes
- c) CHECK if you use a full IPM system with scouting and economic thresholds to manage pests and reduce pest management environmental risk, utilizing pest suppression techniques (including pesticide applications) only after monitoring (including pest scouting) verifies that a pest population has reached an economic threshold.  Yes
- 8.2 CHECK if you use an environmental risk screening tool (such as WIN-PST or similar) to reduce pesticide risk to soil and water resources.  Yes

### Nutrient Management Information

- 9 Do you apply fertilizers or manure on your pastureland?  
If "NO", skip to question 10.  Yes  
 No
- 9.1 CHECK if you soil test on your pastureland fields at least once every 5 years AND you use the test results to plan your nutrient application rates.  Yes
- 9.2 CHECK if you apply fertilizers and manures based on established or realistic forage yields from forage records and you give appropriate credit for nutrients from manure, irrigation water, supplemental feed, or organic matter, as applicable, by using analysis or book values for these sources to plan nutrient application rates and timing.  Yes
- 9.3 Check all that apply to your methods of application of fertilizer or manure.
- a) inject manure or fertilizer at least 2 inches deep  Yes
- b) precision agriculture techniques are used in the application of fertilizer and manure.  Yes
- c) apply on 80% surface cover with at least the minimum grazing heights.  Yes
- 9.4 From choices below (a-b) select the answer that best describes when you apply the majority of nutrients.
- a) Check if you apply most of your fertilizer or manure at the beginning of the growing season as a top-dress.  Yes
- b) Check if most of your fertilizer or manure is split applied; usually an initial application 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.  Yes

### Salinity, Sodicty, and Irrigation Management

- 10 Do you have any Salinity or Sodicty (alkaline soils or seeps) concerns on your pastureland?  
If "NO", skip to Question 11.  Yes  
 No
- 10.1 CHECK if you have identified saline recharge or discharge areas on your pastureland.  Yes
- 10.2 CHECK if you manage saline seeps discharge areas to maintain and/or improve existing salt tolerant vegetation.  Yes
- 10.3 CHECK if you manage the type and rate of soil fertility amendments and irrigation based on your soil and irrigation chemistry for your saline or sodic soils.  Yes
- 11 Do you use irrigation on your pastureland? **If**  Yes  
"YES", answer Questions 11.1 - 11.3.  No
- 11.1 Do you measure the amount of water you use to irrigate?  Yes
- 11.2 Do you schedule your irrigations with some form of soil moisture or evapotranspiration monitoring?  Yes
- 11.3 Has your system been tested to measure distribution uniformity and changes made based on the results of the tests?  Yes

# Rangeland Benchmark Ranking Questions

- 1 **CHECK if you have an adequate grazing and roughage supply to meet livestock demands.**  Yes  
 No
- 2 **CHOOSE ONE (a-d) Grazing Management level BELOW**
- a) Pastures are heavily grazed (more than 65% use).
- b) Stocking rates are managed to achieve proper forage utilization. Pastures are moderately grazed (35-65% use) with even grazing distribution.
- c) Stocking rates are managed to achieve proper forage utilization. Pastures are moderately grazed (35-65% use) with some ungrazed or lightly grazed patches.
- d) Pastures are lightly grazed (less than 35% use) with numerous ungrazed areas creating a patchy appearance.
- 3 **From the choices below (a-d) select the one that best describes the mix of plants growing on your rangeland.**
- 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.
- 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.
- 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.
- d) Number and kinds of plant species onsite represent more than 2/3rds of the number/kinds of plant species typical of natural site conditions. Plants that decrease under grazing pressure (i.e., "decreasers") are still abundant.
- 4 **Do you have watering facilities such as tanks, troughs, etc.?**  Yes  
**If "NO", skip to Question 5.**  No
- How many of your Watering Facilities ( tanks, troughs, etc.) provide safe access and escape for wildlife, provide year around water, and are free of hazards for aerial drinking wildlife (bats, swallows, etc.).**
- a) less than 25%
- b) 25 to 50%
- c) 51 to 75%
- d) more than 75%
- 5 **Do you apply any brush management?**  Yes  
**If "NO", skip to Question 6**  No
- From the choices below (a-d) select the answer that best describes how brush is managed on your rangeland.**
- a) Woody species are not managed for wildlife. There is an evident browse line; or, brush is totally eliminated with brush management measures.
- 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.
- 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.

- 6 Do you have any fences constructed with considerations for wildlife species and their movements?  Yes  
 If "NO", skip to Question 7.  No

How much of your fencing meets state wildlife agency or NRCS standards with considerations for wildlife species and their movements?

- a) less than 25%   
 b) 25 to 50%   
 c) 51 to 75%   
 d) more than 75%

**Water Bodies, Erosion, & Runoff Information**

- 7 CHECK if access roads, stock trails and other critical areas are managed to limit surface water runoff and control accelerated soil erosion. Gully erosion is stabilized.  Yes

- 8 CHECK if 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.  Yes

**Pest Management Information**

- 9 Do you apply any pesticides on your rangeland acres?  Yes  
 If "NO", skip to Question 10.  No

- 9.1 From the questions below select the choice (a-c) that best describes how you manage pests on your rangeland.

- a) CHECK if you apply any pesticides with **no Integrated Pest Management (IPM) system.**   
 b) CHECK if you use some components of an IPM system such as using pest-free seeds and transplants, feeding hay without any noxious weed seeds, spot spraying, individual plant treatment, banding, directed spraying, hand hoeing, using pest-resistant varieties, selecting non-invasive forage species, pest scouting, and biological pest controls.   
 c) CHECK if you use a full IPM system with scouting and economic thresholds to manage pests and reduce pest management environmental risk, utilizing pest suppression techniques (including pesticide applications) only after monitoring (including pest scouting) verifies that a pest population has reached an economic threshold.

- 9.2 CHECK if you use an environmental risk screening tool (such as WIN-PST or similar) to reduce pesticide risk to soil and water resources.

**Salinity and Sodicty Management**

- 10 Do you have any Salinity or Sodicty (alkaline soils or seeps) concerns on your rangeland acres?  Yes  
 If "YES", answer Questions 10.1 and 10.2.  No

- 10.1 CHECK if you have identified saline recharge or discharge areas on your rangeland.

- 10.2 CHECK if you manage saline seeps discharge areas to maintain and/or improve existing salt tolerant vegetation.

# Water Bodies/Water Courses Benchmark Ranking Questions

**A. Do you have any WATER BODIES** (lakes, ponds or wetlands) **on or adjacent to your property?**  Yes  
Wetlands farmed under natural conditions or farmed wetlands do not fit under this category.  No

**1 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 natural vegetation between the edge of the waterbody and adjacent land?**

- a) less than 25%
- b) 25% to 50%
- c) 50% to 75%
- d) more than 75%

**2 Does upland runoff (surface or groundwater) empty directly—without filtration through a vegetated buffer—into any of the lakes/ponds/wetlands on your property?**  Yes  
 No

**B. Do you have any WATER COURSES** (ditches, sinkholes, intermittent or perennial streams, or rivers) **on or adjacent to your property? If "NO", skip to Question 7.**  Yes  
 No

**3 Do you pump or divert water from a water course? If "YES", check any of the following that apply.**  Yes  
 No

- a) Water withdrawal completely dewater stream habitat.
- b) Water diversions or pumps are unscreened (for aquatic animals).
- c) Water diversions or pumps are screened for aquatic animals.

**4 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.**  Yes  
 No

- 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 or downstream at any time of the year.

5 Consider all water courses on your property and check the box below which best describes your situation. Select the condition that best describes 90% of the total length of the streams/ivers on the property.

- a) Natural vegetation sparse or absent along waterways.
- b) Natural vegetation is present along waterway but is not at least 33 feet wide or 2.5 times as wide as the stream channel.
- c) Natural vegetation is present along all margins of waterways AND is at least 33 feet wide or 2.5 times as wide as the stream channel.

6 Consider all water courses on your property and check the box below which best describes your situation. Select the condition that best describes 90% of the total length of the water courses on your property.

- a) Little or no natural vegetation because of unmanaged livestock or motorized vehicle access that damages all streambanks.
- b) Natural vegetation is present, but species and age distribution is limited by unmanaged livestock or unrestricted motorized vehicle access to 50% or less of streambanks.
- c) Natural vegetation is present with good species and age diversity because livestock and motorized vehicle access to all (100%) streambanks are managed to protect streambank and riparian condition.

7 **CHECK if 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.

# Forest Land Benchmark Ranking Questions

1 Choose one of the following descriptions that best represents the majority of your forest land.

- a) A plantation consisting predominantly of one tree species with little or no understory.
- b) A plantation consisting predominantly of one tree species, but has a variety of shrubs and/or grasses and forbs in the understory.
- c) A forest consisting of tree species which naturally occur on the site. Trees are mostly even-aged, generally uniform in height, with little understory vegetation.
- d) A forest consisting of multiple tree species which naturally occur on the site (certain sites may naturally have only one tree species). Trees are uneven-aged (or occur in uneven-aged groups), with an array of tree heights, with little understory vegetation. The forest is actively managed to retain standing dead trees and large downed trees and limbs.
- e) A forest consisting of multiple tree species which naturally occur on the site (certain sites may naturally have only one tree species). Trees are uneven-aged (or occur in uneven-aged groups) with an array of tree heights, and an understory shrub and or forb layer. The forest is actively managed to retain standing dead trees and downed large trees and limbs are abundant. The dead trees and debris are actively managed for wildlife habitat.

2 Has a thinning or improvement harvest been completed recently (past 10 years) on your forest land? If "NO", skip to Question 3.  Yes  
 No

2.1 From the choices below (a-c) select the answer that best describes the thinning or improvement harvesting.

- a) Thinning or improvement harvesting completed on <10% of forest land.
- b) Thinning or improvement harvesting completed on 10-25% of forest land.
- c) Thinning or improvement harvesting completed on >25% of forest land.

2.2 For the forest trails, landings (areas where logs are stacked for loading) and roads used during thinning or harvest activities: SELECT ANY OF THE FOLLOWING THAT APPLY.

- a) Designated skid trails for logging/forest product removal were used to limit disturbance and compaction.
- b) Water bars, culverts and/or rolling dips have been installed on roads and safely outletted.
- c) Forest trails, landings and cut- and fill-slopes of roads are seeded following tree harvest.
- d) During heavy use periods dust was controlled through the use of water, wood chips, rock surfacing or paving.

2.3 During the thinning or harvest, did you follow state Best Management Practices (BMP's) such as riparian setbacks, minimum equipment activity in streams and riparian zones, and low impact stream crossings when working near streams or watercourses?  Yes

- 3 **Have you reforested suitable tree growing areas?**  Yes  
**If "NO", skip to Question 4.**  No

**From the choices below (a-c) select the answer that best describes the site preparation activities for tree planting or natural regeneration.**

- a) Site preparation activities created bare mineral soil and removed slash on less than 10% of the land in the reforested unit.
- b) Site preparation activities created bare mineral soil and removed slash on 10-25% of the land in the reforested unit.
- c) Site preparation activities created bare mineral soil and removed slash on more than 25% of the land in the reforested unit.

- 4 **Do you control the access to your forest by people, vehicles, or animals?**  Yes  
**If "NO", skip to A. Water Bodies.**  No

**From the choices below (a-c)select the answer that best describes the majority of your forestland.**

- a) I monitor and control who and what comes on to my property.
- b) I monitor, control and have my property posted.
- c) I monitor and have my property posted, fenced, gated.

- 5 **Check any of the following measures (a-d) you have taken to reduce wildfire risks to your forest?**

- a) There are access roads to all parts of the property suitable for pumper trucks and other fire vehicles.
- b) There are strategically located firebreaks.
- c) There are strategically located fuelbreaks.
- d) During the fire season water sources are available, clearly identified and accessible.

- A. Do you have any WATER BODIES (lakes, ponds or wetlands) on or adjacent to your forest land?**  Yes  
**If "NO", skip to B. Water Courses.**  No

Natural vegetation means plant communities with species native to the site or introduced species that have become naturalized.

- 6 **What percentage of the total perimeter of these areas has at least a 33-foot wide zone of undisturbed natural vegetation between the edge of the waterbody and adjacent land?**
- a) less than 25%
- b) 26% but less than 50%
- c) 50% - 75%
- d) more than 75%

- 7 **Does upland runoff (surface or groundwater) empty directly—without filtration through a vegetated buffer—into any of the lakes/ponds/wetlands on your property?**  Yes

**B. Do you have any WATER COURSES (ditches, intermittent or perennial streams, or rivers) on or adjacent to your forest land? If "NO", skip to Question 12.**  Yes  
 No

**8 Do you pump (directly or indirectly) or divert water from a river or stream? If "Yes", select appropriate choice below.**  Yes  
 No

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.

**9 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.**  Yes  
 No

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 or downstream at any time of the year.

**10 Consider all streams and rivers on your forest land and check the box below which best describes your situation. Select the condition that best describes 90% of the total length of the streams/rivers on the property.**

a) Natural vegetation sparse or absent along waterways.

b) Natural vegetation is present along waterway but is not at least 33 feet wide or 2.5 times as wide as the stream channel.

c) Natural vegetation is present along all margins of waterways AND is at least 33 feet wide or 2.5 times as wide as the stream channel.

**11 Consider all streams and rivers on your forest land. Check the box below which best describes the condition of vegetation along 90% the streams or rivers on your forest land:**

a) Little or no natural vegetation on the majority of streambanks because of unmanaged livestock grazing, motorized vehicle access or other usage.

b) Natural vegetation is present, but species and age distribution is limited on at least 50% of the streambanks because of unmanaged livestock grazing, motorized vehicle access or other usage.

c) Natural vegetation is present with good species and age diversity because livestock and motorized vehicle access to all (100%) streambanks are managed and limited according to acceptable guidelines.

12 **Is your forest grazed by livestock?**  Yes  
If "NO", skip to Question 13.  No

12.1 **Choose the answer below that best describes how grazing is managed?**

a) Livestock usage is heavy and livestock have free access onto forestland with little or no attempt to manage grazing distribution.

b) Livestock usage is moderate to heavy but livestock are actively managed to control grazing distribution.

c) Grazing does not exceed forage production on any portion of the land. Livestock are managed to rest individual grazing units as needed to maintain optimal forage production.

13 **Are you aware of any invasive or noxious non-native species occurring on your forest land? If "NO", skip to Question 14.**  Yes  
 No

**From the choices below (a-c) select the answer that best describes your invasive or noxious non-native species management.**

a) Invasive or noxious non-native species have been identified.

b) Invasive or noxious non-native species have been identified and are being monitored to check extent and if they are spreading.

c) Invasive or noxious non-native species have been identified, control actions have been taken and monitoring continues.

14 **Choose one of the following answers that describes how pests are controlled on your forest land.**

a) Pesticides are applied but without an Integrated Pest Management Plan.

b) CHECK if a full Integrated Pest Management system is not yet implemented, but one or more IPM management techniques that are appropriate for the site are utilized on a regular basis, such as: avoiding pests by timing of forest harvesting and controlling slash, reducing forest stocking to optimize tree health and pest resistance, favoring pest-resistant forest overstory and understory species, improving habitat for pest predators, using pest-free seeds and transplants, spot spraying, individual plant treatment, banding, directed spraying, hand hoeing, pest scouting, and biological pest controls.

c) CHECK if you use a basic Integrated Pest Management (IPM) system with scouting and economic thresholds to manage pests and reduce pest management environmental risk, utilizing pest suppression techniques (including pesticide applications) only after monitoring (including pest scouting) verifies that a pest population has reached an economic threshold.