

Cropland Existing Activity Conservation Performance

Rotation and Adjacent Habitat Information

1 Enter the length of your rotation or management system 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 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).

a) Enter the number of occurrences in your rotation or management system 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 2e).

b) Enter the number of harvested crops in your rotation or management system 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 or management system 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 or management system 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 or management system 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 Enter the number of times during your rotation or management system that you plant a cover crop that you do not harvest? OR for a vineyard, orchard or other permanent crop enter the percentage (expressed as a decimal number) of the time you maintain cover between the row.

4 Enter the number of different crop species/types in your rotation or management system, 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
"NO", skip to Question 6.

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 months per year with dependable artificial water or precipitation driven flooding on heavy clay soils (Hydrologic group C or D). Yes

c) 3 months per year with dependable artificial water or precipitation driven flooding on heavy clay soils (Hydrologic group C or D) Yes

d) 4 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 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.
- 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
- 7 Do you have any areas such as field borders, odd areas, windbreaks, wetlands, brushy draws, hedgerows, seeps, riparian areas, vegetated ditches, CRP land, 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.
If "NO", skip to Question 8. Yes
 No
- 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) The vegetative cover is 75% or more plant species that do not provide suitable wildlife food and cover. Yes
- b) Vegetative cover is less than 75% introduced species that do not provide wildlife food and cover. 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/cover on an annual basis? - 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 ≥ 8" in height over 50 - 75% of field. Yes
- d) Winter cover crop or hay/forage crop is ≥ 8" in height over >75% of field. Yes

Water Conservation and Residue Management

9 Before field operations, do you check soil moisture by methods such as moisture-by-feel or more sophisticated methods to minimize soil compaction? Yes No

10 Do you consistently use controlled traffic methods (either GPS or manual methods) to minimize soil compaction? Yes No

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 prior to planting (regardless of season). This does not include fertilizer injectors, in-row subsoilers or cover crops. For **field cultivation performed after planting deeper than 4"** to create furrows, enter 1 point for each occurrence.

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 for which you use conservation tillage but maintain at least 30 to 49% soil cover after planting (strip or 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 no till system with at least 50% to 75% residue cover after planting (no till, medium cover). Full width tillage is not included. Mulches, except plastic, are included

f) Enter the number of crops in your rotation for which you use a no till system that maintains at least 75% residue cover after planting (no till with high residue or cover crop establishment). Full width tillage is not included. Mulches are included, except for 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

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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, for wildlife cover. If none of these apply do not answer. Example, for a corn-soybean rotation that has a corn stubble height of at least 8 inches followed by undisturbed soy residue, choose d.

- 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 Is your crop or hayland managed so there are no signs of erosion or gullies after a heavy rainfall, significant snowmelt, or irrigation. Yes

14 Select 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/diversions 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? Yes
If "NO", skip to Question 16. 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) Pesticides are applied **without using an Integrated Pest Management (IPM) system.** Yes
- b) **Some components of an IPM system** are utilized, 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) A **full IPM system is utilized** 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 Do 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 Do you apply manure, compost, or other organic amendment to meet (but not exceed) crop nutrient needs? Yes
- 16.2 Do 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 do you use the test results to plan your nutrient application rates? Yes
- 16.3 Do you apply fertilizers and manures based on established or realistic crop yields from crop records and do 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 Select all that apply when you apply fertilizer or manure. Yes
- a) incorporate (within 24 hours) 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. Yes
- 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. Application split must be at least 50% post emergence. 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 Have you identified saline recharge or discharge areas on your crop or hayland acres? Yes
- 17.2 Do 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 Do 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