2015 Inventory Questions

	General	Soil Erosion Concerns				Soil Quality Functions					Water Quantity Concerns			Water Quality Concerns					Air Quality Concerns				Plants		Animal Concerns				Energy
		sheet, rill, wind, irrigation,	ephemeral, gully	streambank, shoreline*	road banks, construction sites*	organic matter depletion (habitat, compaction, water partitioning)	OM oxidation	salinity, other contaminants	nutrient cycling	compaction	excess water	insufficient water	inefficient use of irrigation water	sediment	nutrients	pesticides	pathogens	salinity	airborne soil particulates (PM)	greenhouse and ozone gases	chemical spray drift*	odors	quantity, diversity, health, vigor	declining populations-T&E species	Domestic Livestock-cover, food, and water	Terrestrial Wildlife-cover, food, connectivity, and water	Aquatic Wildlife-structure, food, water temperature	Declining populations-T&E species	energy conservation
1	Do you have any water bodies (ponds, lakes, or wetlands) or water courses (streams, rivers or ditches) on the indicted land use?																												
	Cropland																												
	Pastureland																												
	Rangeland																												
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 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?																												
	If yes, check any of the following methods you regularly use to control dust.																												
	Regularly spraying water to reduce the dust	2																	2										-2
	Apply biodegradable oils to reduce the dust	3																	4										-1
	Gravel surfacing	2																	3										
	Apply other environmentally benign dust control chemicals	3																	4										-1
	None of the above	-1																	-1										1
3	Identify each energy conservation reduction method used on your farm:																												
	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: • 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”.																			1									5
	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: • Wind or solar powered pumps • Solar powered electric fencing • Any biofuel blend																			1						-1		-1	5
	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: • 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.																			1									5
	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.																			1									5
	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: • 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.																			2									5

2015 Inventory Questions

	Cropland	Soil Erosion Concerns				Soil Quality Functions					Water Quantity Concerns			Water Quality Concerns					Air Quality Concerns				Plants		Animal Concerns				Energy
		sheet, rill, wind, irrigation,	ephemeral, gully	streambank, shoreline*	road banks, construction sites*	organic matter depletion (habitat, compaction, water partitioning)	OM oxidation	salinity, other contaminants	nutrient cycling	compaction	excess water	insufficient water	inefficient use of irrigation water	sediment	nutrients	pesticides	pathogens	salinity	airborne soil particulates (PM)	greenhouse and ozone gases	chemical spray drift*	odors	quantity, diversity, health, vigor	declining populations-T&E species	Domestic Livestock-cover, food, and water	Terrestrial Wildlife-cover, food, connectivity, and water	Aquatic Wildlife-structure, food, water temperature	Declining populations-T&E species	energy conservation
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-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.																												
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: low residue fallow crop periods, idle bare fields, or harvested sod. Sod harvested for turf is differentiated from hay (which is listed under 2e).	**-5**	**-5**			**-5**			**-4**	**-3**									**-4**	**-3**									
	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.	**-3**	**-3**			**-3**			**-2**	**-2**																			
	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 and other woody perennials (orchards, vineyards) without cover in the alleys, Corn dry fodder hogged or grazed, Corn or sorghum silage, Cotton, Crambe, Flaxseed, Guar, Hops, Lentils, Mungbeans, Mustard seed, Pea type crops, Peanuts, Pineapples, Potatoes, Rapeseed, Safflower, Sage, Soybeans, Sugarbeets, Sunflower, Sweet potatoes, Tobacco, High Residue Fallow (>5% cover during the critical erosion period).																												
	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, Chufas, Corn Grain/Popcorn, Cranberries, Desert grass, Guava, Herbs perennial, Kenaf, Maple trees for syrup, Mint all for oil, Peppermint for oil, Rice, Sesame, Small Grains, Sorghum, Sugarcane, Teff, Woody perennials with cover in the alleys including Apricots, Berry/Fruit Crops (Trees and Shrubs), Coffee, Grapes, Nut Trees, Pine trees ornamental, Temples, other orchard/vineyards crops.	**3**	**3**			**3**			**2**	**2**		**2**																	
	e) 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): Dichondra, Grass Hay/Seed, Legume Hay /Seed, Lotus root, or similar herbaceous perennial crops. This does not include grass harvested for sod.	**5**	**5**			**5**			**4**	**3**		**4**																	
3	**Does your rotation or management system contain a cover crop that you do not harvest?**																												
3.1	**Enter the number of years during the rotation length you plant an cover crop not for harvest (if the crop management system is a vineyard, orchard or other similar permanent crop, answer Q#3.2)**	**5**	**5**			**5**		**1**	**5**	**5**				**5**	**5**	**3**	**3**	**2**	**5**	**3**			**4**			**4**	**2**	**1**	**2**
3.2	**Enter the percent (expressed as a decimal number) of the time the management system has a cover crop maintained between the rows**	**5**	**5**			**5**		**1**	**5**	**5**				**5**	**5**	**3**	**3**	**2**	**5**	**3**			**4**			**4**	**2**	**1**	**2**

3.3	**Choose the answer below (a-c) that best describes when the cover crop is terminated.**																											
	a) Cover crop is terminated prior to flowering for non-legumes or between 0-24% bloom for legumes or brassicas	-4	-4			-5		-2	-4.5	-3.5				-2.5	-2.5	-1.5	-1.5	-1	-2.5	-1.5			-2			-2	-1	-0.5	-1
	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	-1	-1			-1.25		-0.5	-1.125	-0.875				-0.625	-0.625	-0.375	-0.375	-0.25	-0.625	-0.375			-0.5			-0.5	-0.25	-0.125	-0.25
	c) Cover crop is terminated at or after soft dough stage for non-legumes or after 50% bloom for legumes or brassicas																											
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.	1	1			5			4	4	3			3	3	3	5	4	1				5						
5	**Do you intentionally flood at least 1/3 of the cropland for wetland wildlife when crops are not growing? If "NO", skip to Question 6.**																											
5.1	**Cropland is intentionally flooded:**																											
	a) Less than 2 months per year.																			-1						1	2	
	b) 2 months per year on heavy clay soils (Hydrologic group C or D).						1							1	1					-1						2	2	1
	c) 3 months per year on heavy clay soils (Hydrologic group C or D)					2	2							1	1					-2						3	3	1
	d) 4 months per year on heavy clay soils (Hydrologic group C or D).					3	3							2	2					-3						4	3	2
	e) More than 4 months per year on heavy clay soils (Hydrologic group C or D).					3	4							2	2					-3						5	3	2
5.2	**Cropland is intentionally flooded:**																											
	a) Less than 2 out of 3 years.																									1	2	2
	b) 2 out of 3 years.																									3	2	2
	c) Annual flooding.																									5	3	3
5.3	**Considering all of your cropland, what percentage is normally flooded?**																											
	a) Less than 33%																									1	2	2
	b) 33 - 50%																									3	2	2
	c) 51 - 75%																									4	2	2
	d) More than 75%																									5	2	2
6	**Does your rotation, orchard or vineyard include perennial hay, grass or legume cover? If "NO," skip to Question 7.**																											
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.	5	5			5			4	5				5	4	2	2		4	4			5			2			
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.**																											
	a) Hayland is composed of species from List B.																									-5		-5	
	b) Hayland is predominantly species from List B but one or more species from List A makes up at least 30% of the stand.																						1			1		1	
	c) Hayland is composed of 1 or 2 species from List A that make up at least 60% of the stand.																						3			3		3	
	d) Hayland is composed of 3 or more species from List A that make up at least 60% of the stand.																						5			5		5	
6.3	**Select the choice that best describes your schedule for mowing hay.** This question assesses the impact of hay mowing practices on wildlife.																											
	a) The entire field is cut during the nesting season																									-5		-5	
	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).																									-1		-1	
	c) Hay cut after 75% of the nesting season is completed.																									1		1	
	d) Hay cut not more than once per year and is cut after 75% of the nesting season using wildlife-friendly harvest techniques.																									2		2	2
	e) Hay cut not more than once per year and is cut after the nesting season.																									3		3	2
	f) Hay cut occasionally, but not each year and is cut before or after the nesting season using wildlife-friendly harvest techniques.					3																				5		5	3
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.																											
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.**																											
	a) Less than 33% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects.																											
	b) 33 – 67% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects.																						3			3		3	
	c) More than 67% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects.																						5			5		5	

7.2	**Select the choice that best describes the AMOUNT of wildlife, pollinator and/or beneficial insect habitat within or adjacent to the crop/hay field.**																											
	a) Habitat is less than 1% of the crop/hay field.																							-5		-5		
	b) Habitat is between 1% and 5% of the crop/hay field.																					1		1	1	1		
	c) Habitat is between 6% and 10 % of the crop/hay field.																					3		3	2	3		
	d) Habitat is more than 10% of the crop/hay field.																					5		5	3	5		
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.**																											
	a) less than 30 feet wide																							-5		-5		
	b) 30 to 75 feet wide																							1	1	1		
	c) 76 to 120 feet wide																							3	2	3		
	d) more than 120 feet wide																							5	3	5		
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?**																											
	a) More than 1320 feet																							-2		-2		
	b) 660 to 1320 feet																							1		1		
	c) 330 to 659 feet																							3		3		
	d) Less than 330 feet																							5		5		
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.																											
	a) 1/4 to less than or equal to 1 acre of food plot or unharvested grain per 4 acres of cropland (minimum 3 feet wide and next to noncrop cover).	1	1			1			1					1					1	1					2		1		
	b) Greater than 1 acre of food plot or unharvested grain per 4 acres of cropland (minimum 3 feet wide and next to noncrop cover).	2	2			2			2	1				2	1				2	2					5		1		
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?**	2								4		2		2									3					1
10	**Do you consistently use controlled traffic methods (either GPS or manual methods) to minimize soil compaction?**	3	2					2		5		3		3	1	1							3					2
11	**Answer each residue management and/or tillage system question below:**																											
	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.	-5	-5			-5	-5		-3	-4		-5		-5	-4	-4	1		-5	-5					-5	-4		-5
	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.	-3	-3			-4	-4		-2			-4		-3	-2	-2	1		-3	-5					-3	-2		-5
	c) Enter the number of crops in your rotation that have full width tillage performed after harvest and leaves more than 3% 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.					-1	-3		-1	-1		2		1	1	1	1		-1	-2								-1
	d) Enter the number of crops in your rotation for which you use conservation tillage (includes mulch tillage) and maintain greater 3% residue cover after planting. Residue cover includes crop residues, cover crops, composts or other natural mulch materials; do not include plastic.	1	1				-2					2		1	1	1	1		1						1	1		
	e) Enter the number of crops in your rotation for which you use a no till system that maintains greater than 5% residue cover after planting. Residue cover includes crop residues, cover crops, composts or other natural mulch materials; do not include plastic.	3	3			3	-1		2	2		4		4	4	2	2		3	3					2	2		3
	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.	5	5			5			4	4		5		5	5	2	2		5	5					3	3		5
12	**Select the choice that best describes the average condition of crop residues left in the field during the winter for wildlife cover.**																											
	a) Residue is removed or buried (i.e., fall tillage, undisturbed soybean residue or any kind of harvested silage).																								1			
	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.																								2	1		
	c) Crop residues are gleaned by livestock but no mechanical disturbance of residue or soils.																								3	1		
	d) Crop residue, grain stubble, hay/forage crop, or cover crop left standing overwinter. Height is less than 8 inches.																								4	1		
	e) Crop residue, grain stubble, hay/forage crop, or cover crop left standing overwinter. Height is greater than 8 inches.																								5	1		

2015 Inventory Questions

Erosion, & Runoff Information																												
13	**Is your cropland or hayland managed so there are no visible signs of erosion or gullies?**	5	5											5	4	4	3										3		
14	**Select any of the following practices that are applied on your cropland or hayland acres:**																												
	contour farming (33)	2	2			1		1				1		2	2														
	contour orchard or other fruit area (331)	3	3			3			3	3		1		4	4	3			4				3			1			
	contour strip cropping (585)	2	2			3		2	2	1		1		3	3	2			2				3						
	windbreaks (38)	3				2								3	2	2			5	1	3	3	2			3			
	terraces (6)	1	4								4	1		4	1											2			
	diversions (362)	1	3								4	1		4	1											2			
	hillside ditch (423)	1	3								4			2															
	grassed waterways (412) for erosion stabilization and concentrated flow		5								4			4	1	2	2									1	3		
	grade stabilization structure (41)		5								4			2															
	rock barrier (555)	1	3								4	1		4	1														
	contour buffer strips (332)	2	2			2						1		3	3	2	3		2				2			2	3		
	herbaceous wind barriers (63)	2				1								2	2	2			4		2		2			1			
	cross wind trap strips (589C)	3				1								2	2	2			4		2		2			1			
Pest Management Information																													
15	**Do you apply any pesticides on your crop or hayland acres?** A "No" answer for a rotation does not generate a negative response for that same					5		5								5				3	5					4	5	4	4
15.1	**Select the choice that best describes how you manage pests on your cropland or hayland acres.**																												
	a) Pesticides are applied to all crops in the rotation without utilizing any pest prevention, avoidance, monitoring, or suppression (PAMS) strategies.					-1		-1								-5				-2	-2					-3	-4	-5	
	b) Pesticides are applied to some crops in the rotation using a site-specific combination of each pest prevention, avoidance, monitoring, and suppression (PAMS) strategies, OR pesticides are applied to all crops in the rotation using only one, two or three of the four PAMS strategies.					1		2								3				2	2		3			2	2	2	1
	c) Pesticides are applied to all crops in the rotation utilizing a site-specific combination of each pest prevention, avoidance, monitoring, and suppression (PAMS) strategies.					4		5								5				5	5		5			4	4	4	2
15.2	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?							3								5					2					3	3	3	
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					2			2						4		4			3		5				1	3	3	4
16.1	**Do you apply nutrients from organic sources?**	2				5			4	4		3			3					2		-1	3				1	1	3
16.1.1	**Are the organic sources analyzed to determine nutrient content, and heavy metal content, if sewage waste/sludge is a source?**	-2				-5			-4	-4		-3			-3					-2		1	-3				-1	-1	-3
16.1.1a	**Consider the primary nutrient (i.e., N, P or K) contained in the organic source in the LEAST quantity, select the answer that best matches the planned rotation on your operation.**																												
	a) The organic source applied exceeds this nutrient need on all the crops.	-1.5				-3.75			-3	-3		-2.25			-2.25					-1.5		0.75	-2.25				-0.75	-0.75	-2.25
	b) The organic source applied exceeds this nutrient need on some of the crops.	-1				-2.5			-2	-2		-1.5			-1.5					-1		0.5	-1.5				-0.5	-0.5	-1.5
	c) The organic source applied meets this nutrient needs on some of the crops.	-0.5				-1.25			-1	-1		-0.75			-0.75					-0.5		0.25	-0.75				-0.25	-0.25	-0.75
	d) The organic source applied meets this nutrient need on all of the crops.																												
16.1.1b	**Consider the primary nutrient (i.e., N, P or K) contained in the organic source in the GREATEST quantity, select the answer that best matches the planned rotation on your operation.**																												
	a) The organic source applied exceeds this nutrient need on all the crops.	-1.5				-3.75			-3	-3		-2.25			-2.25					-1.5		0.75	-2.25				-0.75	-0.75	-2.25
	b) The organic source applied exceeds this nutrient need on some of the crops.	-1				-2.5			-2	-2		-1.5			-1.5					-1		0.5	-1.5				-0.5	-0.5	-1.5
	c) The organic source applied meets this nutrient needs on some of the crops.	-0.5				-1.25			-1	-1		-0.75			-0.75					-0.5		0.25	-0.75				-0.25	-0.25	-0.75
	d) The organic source applied meets this nutrient need on all of the crops.																												
16.2	**Do you soil test ALL 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)?**					2			4						3					1			3						1

2015 Inventory Questions

16.2.1	**Consider the primary nutrient (i.e., N, P or K) needed the MOST 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.																											
	a) The nutrient application rate applied exceeds the soil test recommendation on all the crops.					-1.5			-3						-2.25					-0.75			-2.25					-0.75
	b) The nutrient application rate applied exceeds the soil test recommendation on some of the crops.					-1			-2						-1.5					-0.5			-1.5					-0.5
	c) The nutrient application rate applied meets the soil test recommendation on some of the crops.					-0.5			-1						-0.75					-0.25			-0.75					-0.25
	d) The nutrient application rate applied meets the soil test recommendation on all of the crops.																											
16.2.2	**Consider the primary nutrient (i.e., N, P or K) needed the LEAST 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.																											
	a) The nutrient application rate applied exceeds the soil test recommendation on all the crops.					-1.5			-3						-2.25					-0.75			-2.25					-0.75
	b) The nutrient application rate applied exceeds the soil test recommendation on some of the crops.					-1			-2						-1.5					-0.5			-1.5					-0.5
	c) The nutrient application rate applied meets the soil test recommendation on some of the crops.					-0.5			-1						-0.75					-0.25			-0.75					-0.25
	d) The nutrient application rate applied meets the soil test recommendation on all of the crops.																											
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.**																											
	a) Nutrients are not credited from any source to any crop.					-1.5			-1.5						-2			-1.5		-1		-1.5	-1.5					-1
	b) Nutrients are credited from some sources to some of the crops.																											
	c) Nutrients are credited from some sources to all of the crops.					0.75			0.75						1			0.25		0.5		0.75	0.75					0.5
	d) Nutrients are credited from all sources and to all crops.					1.5			1.5						2			1.5		1		1.5	1.5					1
16.4	**Consider the nitrogen needs of the crops in the rotation that follow a legume crop or legume cover crop, what average percent (enter response in decimal format) of the nitrogen needs are supplied by the legume crop or cover crop?**					3			3						4			3		2		3	3			2	1	1	3
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.**																											
	a) Systems are not used for the planned rotation.																											
	b) Systems are used 74% or less of the crops in the planned rotation.					1			2						1.5					0.5			1.3					0.5
	c) Systems are used on 75% or more of the crops in the planned rotation.					2			4						3					1			3					1
16.6	**Select all that apply when you apply fertilizer or manure.**																											
	a) incorporate (within 24 hours) or inject manure or fertilizer at least 2 inches deep.	-2				3		-1	3	-2		1		-1	2		2		1	3		4	1				1		1
	b) precision agriculture techniques are used in the application of fertilizer and manure.								3	1					5					3			3		2		2		2
	c) apply on 80% residue cover or 80% crop canopy.								2						5								3						
	d) None of the above	-1							1	-1			-1	-1	1							-1							
16.7	**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.					1			-5						-3		-3			-3		-3					-3	-3	-3
	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.					1			2						4					2			2				-1		
	c) Most of the manure or fertilizer is applied after crop emergence or after annual growth begins (greenup) for perennial crops.					1			3						4					3			3						2
	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 5% post emergence.					1			4	-1					5					3			4				2	1	
Salinity, Sodicity, 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.**																											
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 genereate this effect?**	2	1					5					3					5					4					
17.2	**Do you manage nutrient application (type and rate) based on yield effects due to salinity?**	2	1					5	3									5					4					

2015 Inventory Questions

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																											
18.1	Have you implemented an irrigation water management plan?	3	1			1	1	4	3			5	5	2	2	2	2	2	1				3		2		2		4
18.2	Do you measure and record the amount of water you use to irrigate?	3	1			1	1	2				5	5	2	2	2	2	2					2						4
18.3	Do you schedule your irrigations and the amount applied based on the monitoring of soil moisture and/or crop evapotranspiration?	3	1			1	1	2				5	5	2	2	2	2	2					4						4
18.4	Has your irrigation system distribution uniformity been evaluated, and necessary changes made based on the test results?	3	1					3				5	5	2	2	2	2	2					3						4
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																												
18.5.1	Do you manage irrigations based on your crop tolerance, and salinity levels in your soil and irrigation water?					1		5	3				4		2			5					4						2

2015 Inventory Questions

	Pastureland	Soil Erosion Concerns				Soil Quality Functions					Water Quantity Concerns			Water Quality Concerns					Air Quality Concerns				Plants		Animal Concerns				Energy
		sheet, rill, wind, irrigation,	ephemeral, gully	streambank, shoreline*	road banks, construction sites*	organic matter depletion (habitat, compaction, water partitioning)	OM oxidation	salinity, other contaminants	nutrient cycling	compaction	excess water	insufficient water	inefficient use of irrigation water	sediment	nutrients	pesticides	pathogens	salinity	airborne soil particulates (PM)	greenhouse and ozone gases	chemical spray drift*	odors	quantity, diversity, health, vigor	declining populations-T&E species	Domestic Livestock-cover, food, and water	Terrestrial Wildlife-cover, food, connectivity, and water	Aquatic Wildlife-structure, food, water temperature	Declining populations-T&E species	energy conservation
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.**	5	4	4		4		2	3	2		3		3	3	2	3		2	2			5	2	5	3			
2	**SELECT ONE (a-c) Grazing Management level BELOW**																												
	a) Forages are grazed below established minimum grazing heights.	-3	-2	-2		-2		-2	-2	-1		-1		-2	-1	-1	-1						-3		-2	-2		-2	
	b) Forages are grazed at or above established minimum grazing heights. Spot grazing occurs on 50% or more of the acres.	4	5	5		4		2	2	2		2											3		3	4		4	
	c) Forages are grazed at or above established minimum grazing heights. Spot grazing occurs on less than 50% of the acres.	5	5	5		5		3	4	4		4		1	1	1	1						5		5	3		3	
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.**																												
	a) One dominant perennial forage species.																									-2		-1	
	b) Two or more dominant forage species all from one functional group.					1			1			1											2		2	2		2	
	c) Two or more dominant forage species representing two functional groups.					2			2			1											3		3	4		3	
	d) Three or more dominant forage species representing at least two functional groups with at least one being a legume.					3			3			2											5		5	5		4	
4	**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. From the State populated look up table-Select 'Species Info' button to view lists.**																												
	a) Pasture vegetation is composed of species from List B.																									-3		-3	
	b) Pasture vegetation is predominantly species from List B but one or more species from List A make up at least 30% of the stand.																								1	1		1	
	c) Pasture vegetation is composed of 1 or 2 species from List A that make up at least 60% of the stand.																								2	3		2	
	d) Pasture vegetation is composed of 3 or more species from List A that make up at least 60% of the stand.																								3	5		3	
5	**Do you have any areas such as field borders, filter strips, buffers, odd areas, windbreaks, wetlands, brushy draws, hedgerows, seeps, shallow**																												
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.**																												
	a) Less than 33% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects.																												
	b) 33 – 67% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects.																						3			3		3	
	c) More than 67% of the vegetation is native or introduced species that provide food and cover for wildlife, pollinators, and/or beneficial insects.																						5			5		5	
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.																		1	1						-5		-5	
	b) Habitat is between 1% and 5% of the pasture.																		1	1						1	1	1	
	c) Habitat is between 6% and 10% of the pasture.																		1	1						3	2	3	
	d) Habitat more than 10% of the pasture.																		2	2						5	3	5	
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																		1	1						-5		-5	
	b) 30 to 75 feet wide																		1	1						1	1	1	
	c) 76 to 120 feet wide																		1	1						3	2	3	
	d) more than 120 feet wide																		2	2						5	3	5	
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																									-2		-2	
	b) Average distance from the center of the pasture to the habitat is 660 to 1320 feet																									1		1	
	c) Average distance from the center of the pasture to the habitat is 330 to 659 feet																									3		3	
	d) Average distance from the center of the pasture to the habitat is less than 330 feet																									5		5	

2015 Inventory Questions

Water Bodies, Erosion, & Runoff Information																												
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.**	**2**	**5**											**4**	**3**		**2**		**2**							**3**	**2**	
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.**													**3**	**3**		**3**									**3**	**3**	
Pest Management Information																												
8	**Do you apply any pesticides on your pastureland acres?** A "No" answer for a forage mixture does not generate a negative response for that same					**5**		**5**									**5**				**3**	**5**					**4**	**5**	**4**	**4**
8.1	**Select the choice (a-c) below that best describes how you manage pests on your pasture.**																											
	a) Pesticides are applied to all forage species in the mixture without utilizing any pest prevention, avoidance, monitoring, or suppression (PAMS) strategies.					**-1**		**-1**									**-5**				**-2**	**-2**					**-3**	**-4**	**-5**	
	b) Pesticides are applied to some forage species in the mixture using a site-specific combination of each pest prevention, avoidance, monitoring, and suppression (PAMS) strategies, OR pesticides are applied to all forage species in the mixture using only one, two or three of the four PAMS strategies.					**1**		**2**									**3**				**2**	**2**		**3**		**1**	**2**	**2**	**2**	**1**
	c) Pesticides are applied to all forage species in the mixture utilizing a site-specific combination of each pest prevention, avoidance, monitoring, and suppression (PAMS) strategies.					**4**		**5**									**5**				**5**	**5**		**5**		**3**	**4**	**4**	**4**	**2**
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?							**3**									**5**					**2**					**3**	**3**	**3**	
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					**2**			**2**						**4**		**4**				**3**		**5**				**1**	**3**	**3**	**4**
9.1	**Do you apply nutrients from organic sources?**	**2**				**5**			**4**	**4**		**3**			**3**						**2**		**-1**	**3**				**1**	**1**	**3**
9.1.1	**Are the organic sources analyzed to determine nutrient content, and heavy metal content, if sewage waste/sludge is a source?**	**-2**				**-5**			**-4**	**-4**		**-3**			**-3**						**-2**		**1**	**-3**				**-1**	**-1**	**-3**
9.1.1a	**Consider the primary nutrient (i.e., N, P or K) contained in the organic source in the LEAST quantity, select the answer that best matches the forage management system on your operation.**																											
	a) The organic source applied exceeds this nutrient need on all the forages.	**-1.5**				**-3.75**			**-3**	**-3**		**-2.25**			**-2.25**						**-1.5**		**0.75**	**-2.25**				**-0.75**	**-0.75**	**-2.25**
	b) The organic source applied exceeds this nutrient need on some of the forages.	**-1**				**-2.5**			**-2**	**-2**		**-1.5**			**-1.5**						**-1**		**0.5**	**-1.5**				**-0.5**	**-0.5**	**-1.5**
	c) The organic source applied meets this nutrient needs on some of the forages.	**-0.5**				**-1.25**			**-1**	**-1**		**-0.75**			**-0.75**						**-0.5**		**0.25**	**-0.75**				**-0.25**	**-0.25**	**-0.75**
	d) The organic source applied meets this nutrient need on all of the forages.																											
9.1.1b	**Consider the primary nutrient (i.e., N, P or K) contained in the organic source in the GREATEST quantity, select the answer that best matches the forage management system on your operation.**																											
	a) The organic source applied exceeds this nutrient need on all the forages.	**-1.5**				**-3.75**			**-3**	**-3**		**-2.25**			**-2.25**						**-1.5**		**0.75**	**-2.25**				**-0.75**	**-0.75**	**-2.25**
	b) The organic source applied exceeds this nutrient need on some of the forages.	**-1**				**-2.5**			**-2**	**-2**		**-1.5**			**-1.5**						**-1**		**0.5**	**-1.5**				**-0.5**	**-0.5**	**-1.5**
	c) The organic source applied meets this nutrient needs on some of the forages.	**-0.5**				**-1.25**			**-1**	**-1**		**-0.75**			**-0.75**						**-0.5**		**0.25**	**-0.75**				**-0.25**	**-0.25**	**-0.75**
	d) The organic source applied meets this nutrient need on all of the forages.																											
9.2	**Do you soil test ALL forage management system fields following local land grant university guidance (e.g., annually, every 3 years, every 4 years, etc)?**					**2**			**4**						**3**						**1**			**3**					**1**
9.2.1	**Consider the primary nutrient (i.e., N, P or K) needed the MOST 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.																											
	a) The nutrient application rate applied exceeds the soil test recommendation on all the forages.					**-1.5**			**-3**						**-2.25**						**-0.75**			**-2.25**						**-0.75**
	b) The nutrient application rate applied exceeds the soil test recommendation on some of the forages.					**-1**			**-2**						**-1.5**						**-0.5**			**-1.5**						**-0.5**
	c) The nutrient application rate applied meets the soil test recommendation on some of the forages.					**-0.5**			**-1**						**-0.75**						**-0.25**			**-0.75**						**-0.25**
	d) The nutrient application rate applied meets the soil test recommendation on all of the forages.																											

9.2.2	**Consider the primary nutrient (i.e., N, P or K) needed the LEAST 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.																										
	a) The nutrient application rate applied exceeds the soil test recommendation on all the forages.					-1.5			-3						-2.25					-0.75			-2.25					-0.75
	b) The nutrient application rate applied exceeds the soil test recommendation on some of the forages.					-1			-2						-1.5					-0.5			-1.5					-0.5
	c) The nutrient application rate applied meets the soil test recommendation on some of the forages.					-0.5			-1						-0.75					-0.25			-0.75					-0.25
	d) The nutrient application rate applied meets the soil test recommendation on all of the forages.																											
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.**																										
	a) Nutrients are not credited from any source to any forage.					-1.5			-1.5						-2			-1.5		-1		-1.5	-1.5					-1
	b) Nutrients are credited from some sources to some of the foarges.																											
	c) Nutrients are credited from some sources to all of the forages.					0.75			0.75						1			0.25		0.5		0.75	0.75					0.5
	d) Nutrients are credited from all sources and to all forages.					1.5			1.5						2			1.5		1		1.5	1.5					1
9.4	**Select all that apply to your methods of application of fertilizer or manure.**																										
	a) inject manure or fertilizer at least 2 inches deep	-2				3		-1	3	-2		1		-1	2		2		1	3		4	1	0			1		1
	b) precision agriculture techniques are used in the application of fertilizer and manure.								3	1					5					3		0	3		2		2		2
	c) apply on 80% surface cover with at least the minimum grazing heights.								2						5								3						
	d) none of the above	-1							1	-1			-1	-1	1							-1							
9.5	**From choices below (a-b), select the answer that best describes when you apply the majority of nutrients.**																										
	a) Most of the fertilizer or manure is applied at the beginning of the growing season as a top-dress.														3		1					-2						
	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.														4		3			3								
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.**																										
10.1	**Consider methods to minimize subsurface water flow to saline seep areas, do you grow high water use forages or salt tolerant forages?**	2	1					5					3					5					4					
10.2	**Do you manage nutrient application (type and rate) based on yield effects due to salinity?**	2	1					5	3									5					4					
11	**Do you irrigate pastureland? If "YES," answer Questions 11.1 - 11.5. NOTE: a "YES" answer includes wastewater application from on farm**																										
11.1	**Have you implemented an irrigation water management plan?**	3	1			1	1	4	3			5	5	2	2	2	2	2	1				3		2		2		4
11.2	**Do you measure and record the amount of water you use to irrigate?**	3	1			1	1	2				5	5	2	2	2	2	2					2						4
11.3	**Do you schedule your irrigations and the amount applied based on the monitoring of soil moisture and/or forage evapotranspiration?**	3	1			1	1	2				5	5	2	2	2	2	2					4						4
11.4	**Has your irrigation system distribution uniformity been evaluated, and necessary changes made based on the test results?**	3	1					3				5	5	2	2	2	2	2					3						4
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**																												
11.5.1	**Do you manage irrigations based on your forge tolerance, and salinity levels in your soil and irrigation water?**					1		5	3				4		2			5					4						2

2015 Inventory Questions

	Rangeland	Soil Erosion Concerns				Soil Quality Functions					Water Quantity Concerns			Water Quality Concerns					Air Quality Concerns				Plants		Animal Concerns				Energy
		sheet, rill, wind, irrigation,	ephemeral, gully	streambank, shoreline*	road banks, construction sites*	organic matter depletion (habitat, compaction, water partitioning)	OM oxidation	salinity, other contaminants	nutrient cycling	compaction	excess water	insufficient water	inefficient use of irrigation water	sediment	nutrients	pesticides	pathogens	salinity	airborne soil particulates (PM)	greenhouse and ozone gases	chemical spray drift*	odors	quantity, diversity, health, vigor	declining populations-T&E species	Domestic Livestock-cover, food, and water	Terrestrial Wildlife-cover, food, connectivity, and water	Aquatic Wildlife-structure, food, water temperature	Declining populations-T&E species	energy conservation
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.**	5	4	4		4		2	3	2		3		3	1		1		2	1			5	2	5	4		2	
2	**CHOOSE ONE (a-d) Grazing Management level BELOW**																												
	a) Rangeland is heavily grazed (more than 65% use).	-3	-2	-2		-2		-2	-2	-2		-2		-2	-1		-1		-1	-1			-3	-2	-3	-3	-3	-3	
	b) Stocking rates are managed to achieve proper forage utilization. Rangeland is moderately grazed (35-65% use) with even grazing distribution.	4	2	3		4		2	3	4		2							1	1			4	1	5	1	1	1	
	c) Stocking rates are managed to achieve proper forage utilization. Rangeland is moderately grazed (35-65% use) with some ungrazed or lightly grazed patches.	4	2	3		4		2	3	3		2		2	2		2		1	1			4	1	5	3	2	2	
	d) Rangeland is lightly grazed (less than 35% use) with numerous ungrazed areas creating a patchy appearance.	5	4	4		5		3	4	5		3		3	3		3		2	2			5	3	5	5	4	4	
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.																						-3	-3	-1	-3		-3	
	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.																						-1	-1		-1		-1	
	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.																						3	3	3	3		3	
	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.																						5	5	5	5		5	
4	**Do you have watering facilities such as tanks, troughs, etc.?**																												
	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.).																												
	a) less than 25%																									-2		-2	
	b) 25 to 50%																									1		1	
	c) 51 to 75%																									3		3	
	d) more than 75%																									4		4	
5	**Do you apply any brush management?**																												
	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 Saltceadar may be totally removed, if possible.																												
	a) Woody species are not managed for wildlife. There is an evident browse line; or, brush is totally eliminated with brush management measures.																						-1	-1		-5	-3	-3	
	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.																						1			1	2	1	
	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.																						3			5	3	5	

2015 Inventory Questions

6	**Do you have any fences constructed with considerations for wildlife species and their movements?**																											
	How much of your fencing meets state wildlife agency or NRCS standards with considerations for wildlife species and their movements?																											
	a) less than 25%																								-5		-5	
	b) 25 to 50%																								-1		-1	
	c) 51 to 75%																								1		1	
	d) more than 75%																								5		5	
Water Bodies, Erosion, & Runoff Information																												
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.**	2	5											4	3		2		2							3	2	
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.**													3	3		3									3	3	
Pest Management Information																												
9	**Do you apply any pesticides on your rangeland acres?** A "No" answer does not generate a negative response.																											
9.1	**Select the choice (a-c) below that best describes how you manage pests on your rangeland.**																											
	a) Pesticides are applied to all range landuse acres without utilizing any pest prevention, avoidance, monitoring, or suppression (PAMS) strategies.					-1		-1								-5				-2	-2				-3	-4	-5	
	b) Pesticides are applied to some range landuse acres using a site-specific combination of each pest prevention, avoidance, monitoring, and suppression (PAMS) strategies, OR pesticides are applied to all range landuse acres using only one, two or three of the four PAMS strategies.					1		2								3				2	2		3		1	2	2	2	1
	c) Pesticides are applied to all range landuse acres utilizing a site-specific combination of each pest prevention, avoidance, monitoring, and suppression (PAMS) strategies.					4		5								5				5	5		5		3	4	4	4	2
9.2	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?							3								5					2					3	3	3	
Salinity and Sodicity Management																												
10	**Do you have any Salinity or Sodicity (alkaline soils or seeps) concerns on your rangeland acres?**																											
10.1	**Do you manage saline seep discharge areas to maintain and/or improve existing salt tolerant vegetation?**							1										4										

2015 Inventory Questions

	Water	Soil Erosion Concerns				Soil Quality Functions					Water Quantity Concerns			Water Quality Concerns					Air Quality Concerns				Plants		Animal Concerns				Energy
		sheet, rill, wind, irrigation,	ephemeral, gully	streambank, shoreline*	road banks, construction sites*	organic matter depletion (habitat, compaction, water partitioning)	OM oxidation	salinity, other contaminants	nutrient cycling	compaction	excess water	insufficient water	inefficient use of irrigation water	sediment	nutrients	pesticides	pathogens	salinity	airborne soil particulates (PM)	greenhouse and ozone gases	chemical spray drift*	odors	quantity, diversity, health, vigor	declining populations-T&E species	Domestic Livestock-cover, food and water	Terrestrial Wildlife-cover, food, connectivity, and water	Aquatic Wildlife-structure, food, water temperature	Declining populations-T&E species	energy conservation
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.																													
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.**																												
	a) less than 25%			1										1	1	1	1									-5	-3		
	b) 25% to 50%			3										3	3	3	3												
	c) 51% to 75%			4										4	4	4	4									3	2		
	d) more than 75%			5										5	5	5	5									5	4		
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?**													-5	-5	-5	-5										-3		
4. Do you have any WATER COURSES (ditches, sinkholes, intermittent or perennial streams, or rivers) on or adjacent to your property?																													
5	**Do you pump (directly or indirectly) or divert water from a river or stream? If "Yes", select appropriate choice below.**																												
	a) Water withdrawal completely dewaters stream habitat.																									-5	-5	-5	
	b) Water withdrawal diminishes streamflow; diversions or pumps are unscreened (for aquatic animals).																									-3	-3	-3	
	c) Water withdrawal diminishes streamflow; diversions or pumps are screened (for aquatic animals).																									3	2	2	
	d) None of the above																												
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.**																												
	a) Structure blocks aquatic organisms from passing upstream or downstream during all or part of the year.																									-5	-5	-5	
	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	5	5	
7	**Considering all water courses on your property, select the choice that best describes 90% of their total length. These areas could be established filter strips or other riparian buffers.**																												
	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.			-5										-5	-5	-5	-5				-1		-5			-5	-5	-5	
	b) The water course is well vegetated. The width of the vegetation meets state minimum buffer width for water quality protection.			3										3	3	3	3				1		2			2	3		
	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' for large streams).			5										5	5	5	5				2		3			3	5	1	
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.**																												
	a) Existing vegetation is dominated by a single species and is primarily non-native and may include invasive species.																						-5	-5		-5	1	-2	
	b) Existing vegetation is diverse and is primarily non-native to the site. Invasive species are not present.																						2			2	3		
	c) Existing vegetation is diverse and is predominately native to the site.																						5	4		5	5	2	
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.														5	5	5										3	3	

2015 Inventory Questions

Forest-General

		Soil Erosion Concerns				Soil Quality Functions					Water Quantity Concerns			Water Quality Concerns					Air Quality Concerns				Plants		Animal Concerns				Energy
		sheet, rill, wind, irrigation,	ephemeral, gully	streambank, shoreline*	road banks, construction sites*	organic matter depletion (habitat, compaction, water partitioning)	OM oxidation	salinity, other contaminants	nutrient cycling	compaction	excess water	insufficient water	ineffient use of irrigation water	sediment	nutrients	pesticides	pathogens	salinity	airborne soil particulates (PM)	greenhouse and ozone gases	chemical spray drift*	odors	quantity, diversity, health, vigor	declining populations-T&E species	Domestic Livestock-cover, food, and water	Terrestrial Wildlife-cover, food, connectivity, and water	Aquatic Wildlife-structure, food, water temperature	Declining populations-T&E species	energy conservation
1	**Do you have unpaved farm roads used by farm vehicles (does not include unpaved county 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?**																												
	If yes, check any of the following methods you regularly use to control dust.																												
	Regularly spraying water to reduce the dust	2																	2										-2
	Apply biodegradable oils to reduce the dust	3																	4										-1
	Gravel surfacing	2																	3										
	Apply other environmentally benign dust control chemicals	3																	4										-1
	None of the above	-1																	-1										1
2	**Identify each energy conservation reduction method used on your farm:**																												
	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: • 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".																			1									5
	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: • Wind or solar powered pumps • Solar powered electric fencing • Any biofuel blend																			1						-1		-1	5
	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: • 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.																			1									5
	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.																			1									5
	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: • 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.																			2									5

2015 Inventory Questions

	Forest Land	Soil Erosion Concerns				Soil Quality Functions					Water Quantity Concerns			Water Quality Concerns					Air Quality Concerns				Plants		Animal Concerns				Energy
		sheet, rill, wind, irrigation,	ephemeral, gully	streambank, shoreline*	road banks, construction sites*	organic matter depletion (habitat, compaction, water partitioning)	OM oxidation	salinity, other contaminants	nutrient cycling	compaction	excess water	insufficient water	inefficient use of irrigation water	sediment	nutrients	pesticides	pathogens	salinity	airborne soil particulates (PM)	greenhouse and ozone gases	chemical spray drift*	odors	quantity, diversity, health, vigor	declining populations-T&E species	Domestic Livestock-cover, food, and water	Terrestrial Wildlife-cover, food, connectivity, and water	Aquatic Wildlife-structure, food, water temperature	Declining populations-T&E species	energy conservation
1	**Select 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.	2	2			3			3	-1		2		2					4	5			2	-2		-4		-4	
	b) A plantation consisting predominantly of one tree species, but has a variety of shrubs and/or grasses and forbs in the understory.	4	4			4			4	-1		4		4					4	5			4	-1		2		2	
	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.	1	1			3			3	1		2		1					4	5			3			1		1	
	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.	3	3			4			4	2		4		3					4	5			4	1		3		3	
	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.	5	5			5			5	3		5		5					5	5			5	5		5		5	
	f) Other	1	1			3			3	1		2		1					4	5			3			1		1	
2	**Has a thinning or improvement harvest been completed recently (past 10 years) on your forest land?**																												
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.																						3			1			
	b) Thinning or improvement harvesting completed on **10-25%** of forest land.									-1										1			4			2		1	
	c)Thinning or improvement harvesting completed on **>25%** of forest land.									-2										2			5			3		2	
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.	1	1							2				2															2
	b) Water bars, culverts and/or rolling dips have been installed on roads and safely outletted.	3	3		3						3			4															
	c) Forest trails, landings and cut- and fill-slopes of roads are seeded following tree harvest.	5	3		3	2			1	1				4					1							1			
	d) During heavy use periods dust was controlled through the use of water, wood chips, rock surfacing or paving.																		4										
	e) None of the above	-1			-1									-1					-1										
2.3	**During the thinning or harvest, did you use practices to protect riparian areas such as riparian setbacks, minimum equipment activity in streams and riparian zones and low impact stream crossings when working near streams or watercourses?**		3	5						2				4									3			2	5	2	
3	**Have you reforested suitable tree growing areas?**																												
	From the choices below (a-c), select the answer that best describes the site preparation activities for tree planting or natural regeneration.																												
	a) Where a timber harvest has occurred, site preparation activities created bare mineral soil and removed slash on less than 10% of the land in the reforested unit. If tree planting took place on abandoned cropland or grassland little or no site preparation was done.									-1																			2
	b) Where a timber harvest has occurred, site preparation activities created bare mineral soil and removed slash on 10-25% of the land in the reforested unit. If tree planting took place on abandoned cropland or grassland, a moderate level of site preparation was applied (mechanical and/or chemical destruction of existing vegetation).	-1	-1			-1			-1	-2				-1		-1			-1							-1			1
	c) Where a timber harvest has occurred, site preparation activities created bare mineral soil and removed slash on more than 25% of the land in the reforested unit. If tree planting took place on abandoned cropland or grassland, heavy site preparation was applied (mechanical and/or chemical destruction of existing vegetation).	-2	-2			-2			-2	-3				-2		-2			-2							-2			

2015 Inventory Questions

4	**Do you control the access to your forest by people or vehicles?**																											
	From the choices below (a-d), select the answer that best describes the majority of your forest land.																											
	a) I monitor and control who and what comes on to my property.	1	1		1									1				1				1	1		1		2	
	b) I monitor, control and have my property posted.	2	2		2									2				2				2	2		2		2	
	c) I monitor and have my property posted, access points are fenced, gated.	3	3		3									3				3				3	3		2		2	
	d) None of the above																											
5	**Select any of the following measures (a-f) 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.	-1	-1		-2					-2				-1					3			3			-2	2	-2	
	b) There are strategically located firebreaks.	-1	-1							-2				-1					5			3			3	3	3	
	c) There are strategically located fuelbreaks.																		3			3			3	3	3	
	d) During the fire season water sources are available, clearly identified and accessible.																		3			3			3	3	3	
	e) Prescribed burning is conducted as needed or on a recurring schedule.																	-1				3	3		3		3	-1
	f) None of the above																											
6. Do you have any WATER BODIES (lakes, ponds or wetlands) on or adjacent to your forest land?																												
6.1	**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?**																											
	a) less than 25%			1										1	1										-5	-3		
	b) 26% but less than 50%			3										3	3													
	c) 50% - 75%			4										4	4										3	2		
	d) more than 75%			5										5	5										5	4		
6.2	**Does upland runoff (surface or groundwater) empty directly—without filtration through a vegetated buffer—into any of the lakes/ponds/wetlands on your forest land?**													-5	-5											-5	-2	
7. Do you have any WATER COURSES (ditches, sinkholes, intermittent or perennial streams, or rivers) on or adjacent to your property?																												
8	**Do you pump (directly or indirectly) or divert water from a river or stream? If "Yes", select appropriate choice below.**																											
	a) Water withdrawal completely dewaters stream habitat.																								-5	-5	-5	
	b) Water withdrawal diminishes streamflow; diversions or pumps are unscreened (for aquatic animals).																								-3	-3	-3	
	c) Water withdrawal diminishes streamflow; diversions or pumps are screened (for aquatic animals).																								3	2	2	
	d) None of the above																											
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.**																											
	a) Structure blocks aquatic organisms from passing upstream or downstream during all or part of the year.																								-5	-5	-5	
	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	5	5	
10	**Consider all streams and rivers on your forest land and select the choice below which best describes your situation. Select the condition that best describes 90% of the total length of the streams/rivers on your forest land.**																											
	a) Natural vegetation sparse or absent along waterways.			-3										-3	-2										-5	-5	-5	
	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.			2										2	2										1			
	c) Natural vegetation is present along all margins of waterways capable of supporting vegetation AND is at least 33 feet wide or 2.5 times as wide as the stream channel.			5										5	5										5	3	3	

2015 Inventory Questions

11	**Consider all streams and rivers on your forest land. Select the choice 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.			-5										-5	-5								-3			-5	-5	-5		
	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.			1										1	1								1			1	1	1		
	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.			5										5	5								4			4	3	3		
12	**Is your forest grazed by livestock?**																													
12.1	**Select the answer below that best describes how grazing is managed?**																													
	a) Livestock usage is heavy and livestock have free access onto forest land with little or no attempt to manage grazing distribution.	-4	-4			-1			-1	-3				-4	-2		-2				-1			-4	-5	-3	-4		-4	
	b) Livestock usage is moderate to heavy but livestock are actively managed to control grazing distribution.	-1	-1							-2				-1	-1		-1							-1	-1	1				
	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.	3	3			3			2					3	2								2	2	2	4	2		2	
13	**Are you aware of any invasive or noxious non-native species occurring on your forest land?**																													
13.1	**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.																						3	1		3		3		
14	**Select one of the following answers that describes how pests are controlled on your forest land.**																													
	a) Pest management strategies are applied to all forest landuse acres <u>without</u> utilizing any pest prevention, avoidance, monitoring, or suppression (PAMS) strategies.					-1		-1								-5				-2	-2					-3	-4	-5		
	b) Pest management strategies are applied to <u>some</u> forest landuse 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> forest landuse acres using <u>only</u> one, two or three of the four PAMS strategies.					1		2								3				2	2		3		1	2	2	2	1	
	c) Pest management strategies are applied to all forest landuse acres utilizing a site-specific combination of each pest prevention, avoidance, monitoring, and <u>suppression (PAMS) strategies</u>.					4		5								5				5	5		5		3	4	4	4	2	
	d) Pest management strategies are not applied.																													