

16.4	Consider the nitrogen needs of the crops in the rotation that follow a legume crop or legume cover crop, what <u>average percent</u> (enter response in decimal format) of the nitrogen needs are supplied by the legume crop or cover crop?						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								1.5																								0.5	
	c) Systems are used on 75% or more of the crops in the planned rotation.						2								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	
	b) precision agriculture techniques are used in the application of fertilizer and manure.																																						2	
	c) apply on 80% residue cover or 80% crop canopy.																																							
	d) None of the above	-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																																	
	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																																	
	c) Most of the manure or fertilizer is applied after crop emergence or after annual growth begins (greenup) for perennial crops.						1																																	
	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																																	
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 generate this effect?	2	1																																					
17.2	Do you manage nutrient application (type and rate) based on yield effects due to salinity?	2	1																																					
18	Do you irrigate cropland and/or hayland? If "YES," answer Questions 18.1 – 18.5. NOTE: a "YES" answer includes wastewater application from on farm																																							
18.1	Have you implemented an irrigation water management plan?	3	1				1	1																																
18.2	Do you measure and record the amount of water you use to irrigate?	3	1				1	1																																
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																																
18.4	Has your irrigation system distribution uniformity been evaluated, and necessary changes made based on the test results?	3	1																																					
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																																	

Pastureland		Soil Erosion Concerns				Soil Quality Functions				Water Quantity Concerns			Water Quality Concerns					Air Quality Concerns				Plants		Animal Concerns				Energy Concerns
		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
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.																											
	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.																											
	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.																											
	c) Pasture vegetation is composed of 1 or 2 species from List A that make up at least 60% of the stand.																											
	d) Pasture vegetation is composed of 3 or more species from List A that make up at least 60% of the stand.																											
5	Do you have any areas such as field borders, filter strips, buffers, odd areas, windbreaks, wetlands, brushy draws, hedgerows, seeps, shallow water																											
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
	b) Habitat is between 1% and 5% of the pasture.																	1	1									1
	c) Habitat is between 6% and 10% of the pasture.																	1	1									3
	d) Habitat more than 10% of the pasture.																	2	2									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
	b) 30 to 75 feet wide																	1	1									1
	c) 76 to 120 feet wide																	1	1									3
	d) more than 120 feet wide																	2	2									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																											
	b) Average distance from the center of the pasture to the habitat is 660 to 1320 feet																											
	c) Average distance from the center of the pasture to the habitat is 330 to 659 feet																											
	d) Average distance from the center of the pasture to the habitat is less than 330 feet																											

Rangeland	Soil Erosion Concerns				Soil Quality Functions				Water Quantity Concerns			Water Quality Concerns					Air Quality Concerns				Plants		Animal Concerns				Energy Concerns
	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
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.																										
2	CHOOSE ONE (a-d) Grazing Management level BELOW																										
	a) Rangeland is heavily grazed (more than 65% use).																										
	b) Stocking rates are managed to achieve proper forage utilization. Rangeland is moderately grazed (35-65% use) with even grazing distribution.																										
	c) Stocking rates are managed to achieve proper forage utilization. Rangeland is moderately grazed (35-65% use) with some ungrazed or lightly grazed patches.																										
	d) Rangeland is lightly grazed (less than 35% use) with numerous ungrazed areas creating a patchy appearance.																										
3	From the choices below (a-d), select the one that best describes the mix of plants growing on your rangeland.																										
	a) Rangeland acres are predominantly occupied by non-native plant species. Native plants have mostly been replaced due to invasion, grazing pressure or seeding to non-native species.																										
	b) Number and kinds of plant species represent less than 1/3 of the potential native plant community for the natural site. Plants that increase under grazing pressure (e.g., "increasers") are abundant.																										
	c) Number and kinds of plant species on site is between 1/3 and 2/3rds of the number and kinds of plants typically expected for the natural site.																										
	d) Number and kinds of plant species onsite represent more than 2/3rds of the number/kinds of plant species typical of natural site conditions. Plants that decrease under grazing pressure (i.e., "decreasers") are still abundant.																										
4	Do you have watering facilities such as tanks, troughs, etc.?																										
	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%																										
	b) 25 to 50%																										
	c) 51 to 75%																										
	d) more than 75%																										
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 Saltcedar 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.																										
	b) Woody species are managed so that populations are only partially eliminated with brush management measures. There is absence of a browse line, although hedging on key browse plants may be observed.																										
	c) Woody species are managed so that populations are only partially eliminated with brush management measures. Brush management is done in patterns and amounts developed with wildlife considerations.																										
6	Do you have any fences constructed with considerations for wildlife species and their movements?																										
	How much of your fencing meets state wildlife agency or NRCS standards with considerations for wildlife species and their movements?																										
	a) less than 25%																										
	b) 25 to 50%																										
	c) 51 to 75%																										
	d) more than 75%																										

