

<p>Resource Concern - Cause</p> <p>A resource concern (RC) is a degradation of the soil, water, air, plant, or animal resource base to an extent that the sustainability or intended use of the resource is impaired. Because NRCS quantifies or describes resource concerns as part of a comprehensive conservation planning process that includes client objectives, human and energy resources are considered components of the resource base.</p> <p>The “Cause” is the specific reason or threat to the resource that results in the resource concern.</p>	<p>Description of Concern</p>	<p>Land Use</p> <p>* Required Assessment</p>	<p>Planning Criteria</p> <p>A planning criterion is a quantitative or qualitative method to assess the existing condition of the natural resources on a site to determine whether additional treatment is needed to address a specific potential resource concern.</p> <p>Planning Consideration</p> <p>A planning consideration is a description of potential actions or activities that should be considered to help address an identified resource concern and/or to address unintended consequences of an action. Planning considerations are identified for resource concerns when it is not appropriate or technologically feasible to identify specific criteria or a threshold for treatment.</p>	<p>Measurement & Assessment Tools</p> <p>Description of the technology or process for determining if assessment criteria are met.</p> <p><i>NOTE: Not all tools shown in this section are applicable. Planners should utilize the appropriate tool(s) for the landuse(s) to evaluate a particular resource concern based on the planning criteria required.</i></p>
			<p>Screening Level</p> <p>Screening level criteria are defined, when appropriate, to identify sites with conditions that have little or no probability of needing additional treatment to address the specific resource concern. If the site meets the screening level criteria, then no other assessment is needed to document that planning criteria are met on this site. States can delete or edit nationally identified screening criteria to address localized conditions</p>	<p>Basic Assessment Level</p> <p>Basic assessment level criteria are used when a site does not meet screening level criteria, or when no screening level criteria are defined. Assessment levels are also used when formulating and evaluating alternatives. National criteria establish the minimum for all sites. States may add state-specific criteria to address local conditions.</p>

SOIL

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
- 1 SOIL EROSION - Sheet And Rill Erosion	Detachment and transportation of soil particles caused by rainfall runoff/splash or irrigation runoff that degrades soil quality	• Crop*	Permanent ground cover > 90% and slope < 10%	Water erosion rate ≤ T	• RUSLE2
		• Developed Land* • Farmsteads* • Associated Ag Land* • Designated Protected Area* • Other Rural Land* • Pasture*	Permanent ground cover > 90% and slope < 10%	Water erosion rate ≤ T	• RUSLE2
		• Forest*	Soil surface organic residue cover > 80%	Site is stable and without visible signs of erosion	• Visual Inspection
- 2 SOIL EROSION – Concentrated flow erosion	Untreated classic gullies may enlarge progressively by head cutting and/or lateral widening. Ephemeral gullies occur in the same flow area and are obscured by tillage. This includes concentrated flow erosion caused by runoff from rainfall, snowmelt or irrigation water.	• Crop*	Ephemeral gullies are not occurring AND Classic gullies are not present	Conservation practices and managements are in place to prevent or control ephemeral gullies AND Classic gully management is adequate to stop the progression of head cutting and widening and are offsite impacts are minimized by vegetation and/or structures	• Field measurements / observations/photos • Kentucky Gully Calculator • KPCS – Kentucky Pasture Condition Scoresheet (CPS 528)
		• Forest* • Farmsteads* • Pasture* • Developed Land* • Associated Ag Land* • Designated Protected Area* • Other Rural Land*	Classic gullies are not present	Classic gully management is adequate to stop the progression of head cutting and widening and are offsite impacts are minimized by vegetation and/or structures OR For pasture a score of >4 KPCS on the Gully Erosion Element	

SOIL

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
- 3 SOIL EROSION– Excessive bank erosion from streams shorelines or water conveyance channels	Sediment from banks or shorelines threatens to degrade water quality and limit use for intended purposes	<ul style="list-style-type: none"> • Crop* • Forest • Developed Land* • Associated Ag Land* • Designated Protected Area* • Water* • Other Rural Land* • Farmsteads* 	No streams or shoreline are on or adjacent to site OR No bank erosion from streams, shorelines or conveyance channels present	[For shorelines and water conveyance channels; Banks are stable or commensurate with normal geomorphological processes AND For streambanks: SVAP2 bank condition element score ≥ 5] OR If present, bank erosion is caused by upstream land use and beyond the client's control	<ul style="list-style-type: none"> • Stream Visual Assessment Protocol (SVAP2) <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> • Photographs w/ planner observation
		<ul style="list-style-type: none"> • Pasture* 	No streams or shoreline are on or adjacent to site OR No bank erosion from streams, shorelines or conveyance channels present	KPCS - streambank / shoreline erosion element score ≥ 4 AND For shorelines and water conveyance channels; Banks stable or commensurate with normal geomorphological processes AND If present, bank erosion is caused by upstream land use and beyond the client's control	<ul style="list-style-type: none"> • Photographs w/ planner observation AND (as appropriate) • KPCS – Kentucky Pasture Condition Scoresheet (CPS 528)
- 4 SOIL QUALITY DEGRADATION - Subsidence	Loss of volume and depth of organic soils due to oxidation caused by above normal microbial activity resulting from excessive water drainage, soil disturbance, or extended drought. <i>This excludes karst / sinkholes issues or depressions caused by underground activities.</i>	<ul style="list-style-type: none"> • Crop • Forest • Associated Ag Land • Designated Protected Area • Pasture 	Histosol soils are not present OR Histisol soils are not exhibiting subsidence	Subsidence is adequately managed to meet client's objectives	Client input / planner observation

SOIL

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
- 5 SOIL QUALITY DEGRADATION – Compaction	Management induced soil compaction resulting in decreased rooting depth that reduces plant growth, animal habitat and soil biological activity	<ul style="list-style-type: none"> • Crop • Forest • Associated Ag Land • Designated Protected Area • Other Rural Land 	Soil compaction is not a problem AND Activities do not cause soil compaction problems	Compaction is managed to meet Client’s production and management objectives	<ul style="list-style-type: none"> • Client input / planner observation of soil and/or plant condition • Soil probe or penetrometer readings
		<ul style="list-style-type: none"> • Pasture 	Soil compaction is not a problem AND Activities do not cause soil compaction problems	KPCS – compaction element score ≥ 4	<ul style="list-style-type: none"> • Client input / planner observation • Soil probe or penetrometer readings • KPCS – Kentucky Pasture Condition Scoresheet (CPS 528)
- 6 SOIL QUALITY DEGRADATION – Organic matter depletion	Soil organic matter is not adequate to provide a suitable medium for plant growth, animal habitat, and soil biological activity	<ul style="list-style-type: none"> • Crop* 	Permanent ground cover > 80%	SCI > 0	RUSLE2
		<ul style="list-style-type: none"> • Pasture 	Permanent ground cover > 80%	SCI > 0 OR [KPCS - plant cover element score ≥ 4 AND KPCS - plant residue element score ≥ 4]	<ul style="list-style-type: none"> • KPCS – Kentucky Pasture Condition Scoresheet (CPS 528) • RUSLE2
		<ul style="list-style-type: none"> • Forest 	Soil organic matter depletion is not a problem AND Activities do not cause soil organic matter depletion	Ground cover meets state criteria specific to ecological site OR Soil organic matter is managed to meet client objectives	<ul style="list-style-type: none"> • Client input / planner observation • Corresponding Ecological Site Description (ESD)
- 7 SOIL QUALITY DEGRADATION – Concentration of salts or other chemicals	Concentration of salts leading to salinity and/or sodicity reducing productivity or limiting desired use Concentrations of other chemicals impacting productivity or limiting desired use	<ul style="list-style-type: none"> • Crop • Pasture • Associated Ag Land • Farmsteads 	Activities do not cause salinity/sodicity problems	Conservation practices and managements are in place to mitigate on-site effects	Soil test analysis that shows elevated salinity or concentrations of other chemicals

WATER

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
<p>- 8 EXCESS WATER – Ponding, flooding, seasonal high water table, seeps, and drifted snow</p>	<p>Surface water or poor subsurface drainage restricts land use and management goals. Wind-blown snow accumulates around and over surface structures, restricting access to humans and animals.</p>	<ul style="list-style-type: none"> • Crop • Forest • Farmsteads • Pasture • Developed Land • Associated Ag Land • Designated Protected Area • Other Rural Land 	<p>Excess water is not a problem AND Activities do not cause ponding/flooding problems</p>	<p>Excess water is managed to meet client’s objectives</p>	<ul style="list-style-type: none"> • Client input / planner observation • Photographs (when possible)
<p>- 9 INSUFFICIENT WATER – Inefficient moisture management</p>	<p>Natural precipitation is not optimally managed to support desired land use goals or ecological processes</p>	<ul style="list-style-type: none"> • Crop • Developed Land • Forest • Associated Ag Land • Designated Protected Area 	<p>Moisture management is not a problem AND Activities do not cause inefficient moisture management</p>	<p>Runoff and evapotranspiration levels are minimized to meet client’s management objectives</p>	<ul style="list-style-type: none"> • Client input / planner observation • Client Records
<p>- 10 INSUFFICIENT WATER – Inefficient use of irrigation water</p>	<p>Irrigation water is not stored, delivered, scheduled and/or applied efficiently</p> <p>Aquifer or surface water withdrawals threaten sustained availability of ground or surface water</p> <p>Available irrigation water supplies have been reduced due to aquifer depletion, competition, regulation and/or drought</p>	<p>All*</p>	<p>PLU is not irrigated</p>	<p>IWI ≥ 85%</p>	<ul style="list-style-type: none"> • Client input / planner observation • Farm Irrigation Rating Index (FIRI)

WATER

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
<p>- 11 WATER QUALITY DEGRADATION – Excess nutrients in surface and ground waters</p>	<p>Nutrients - organic and inorganic - are transported to receiving waters through surface runoff and/or leaching into shallow ground waters in quantities that degrade water quality and limit use for intended purposes</p>	<ul style="list-style-type: none"> • Crop* 	<p>Organic or inorganic nutrients are not applied AND PLU is not grazed</p>	<p>Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields AND Conservation practices and managements are in place and implemented to minimize offsite impacts.</p>	<ul style="list-style-type: none"> • Client input / planner observation • RUSLE2 • Nutrient Budget • Tissue Test • Soil Test • Water Quality Data/Analysis • Photographs • Stream Visual Assessment Protocol (SVAP2) • 303(d) List
		<ul style="list-style-type: none"> • Pasture* 	<p>Organic or inorganic nutrients are not applied AND Grazed PLU is not adjacent to streams, ponds, or lakes AND There are no confined livestock areas</p>	<p>KPCS - streambank / shoreline erosion element score ≥ 4 AND KPCS - livestock concentration areas element score ≥ 4 OR Nutrients are applied and based on a soil test, tissue tests or nutrient budget</p>	<ul style="list-style-type: none"> • KPCS – Kentucky Pasture Condition Scoresheet (CPS 528) • Stream Visual Assessment Protocol (SVAP2) • 303(d) List • Photographs • Tissue Test • Soil Test • Nutrient Budget • Water Quality Data/Analysis • Client input / planner observation
		<ul style="list-style-type: none"> • Developed Land 	<p>Organic or inorganic nutrients are not applied</p>	<p>Nutrients if applied, are based on a soil test, tissue tests or nutrient budget AND Conservation practices and managements are in place to minimize offsite impacts (e.g. Sediment and Erosion Control Plan)</p>	<ul style="list-style-type: none"> • Soil Test • 303(d) List • Photographs • Tissue Test • Nutrient Budget • Water Quality Data/Analysis • Client input / planner observation • Stream Visual Assessment Protocol (SVAP2)
		<ul style="list-style-type: none"> • Other Rural Land • Associated Ag Land • Designated Protected Area • Water • Forest 	<p>Organic or inorganic nutrients are not applied AND PLU is not grazed AND There are no confined livestock areas</p>	<p>Nutrients if applied, are based on a soil test, tissue tests or nutrient budget AND Conservation practices and managements are in place to minimize offsite impacts</p>	<ul style="list-style-type: none"> • Client input/planner observation • Photographs • Tissue Test • Client Records • Water Quality Data/Analysis • 303(d) List • SVAP2 • Nutrient Budget • Water Quality Data/Analysis

WATER

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
<p>- 11 WATER QUALITY DEGRADATION – Excess nutrients in surface and ground waters</p>	<p>Nutrients - organic and inorganic - are transported to receiving waters through surface runoff and/or leaching into shallow ground waters in quantities that degrade water quality and limit use for intended purposes</p>	<ul style="list-style-type: none"> • Farmsteads* 	<p>Organic or inorganic nutrients are not applied AND PLU is not grazed AND There are no confined livestock areas</p>	<p>Conservation practices and managements are in place to minimize offsite impacts AND Nutrient and amendment applications are based on soil or tissue tests and nutrient budgets for realistic yields</p>	<ul style="list-style-type: none"> • Client input / planner observation • 303(d) List • Client Records • Water Quality Data/Analysis • Photographs <p>Stream Visual Assessment Protocol (SVAP2)</p>
<p>- 12 WATER QUALITY DEGRADATION – Pesticides transported to surface and ground waters</p>	<p>Pest control chemicals are transported to receiving waters in quantities that degrade water quality and limit use for intended purposes</p>	<ul style="list-style-type: none"> • All 	<p>Pest control chemicals are not applied</p>	<p>Pesticides are stored, handled, disposed and managed to prevent runoff, spills, leaks and leaching AND Conservation practices and managements are in place to minimize offsite impacts</p>	<p>Client input / planner observation AND WinPST Assessment</p>
<p>- 13 WATER QUALITY DEGRADATION – Excess pathogens and chemicals from manure, bio-solids or compost applications</p>	<p>Pathogens, pharmaceuticals, and other chemicals carried by land applied soil amendments are transported to receiving waters in quantities that degrade water quality and limit use for intended purposes.</p> <p><i>This resource concern also includes the off-site transport of leachate and runoff from compost or other organic materials of animal origin.</i></p>	<ul style="list-style-type: none"> • Crop* • Farmsteads* • Forest • Developed Land • Associated Ag Land • Other Rural Land • Designated Protected Area • Water • Pasture* 	<p>Are potential sources of pathogens or pharmaceuticals applied on the land</p>	<p>Organic materials are applied, stored, and/or handled to mitigate negative impacts to water sources OR Implementation of CNMP or NMP as appropriate.</p>	<ul style="list-style-type: none"> • Client input / planner observation • 303(d) List • Water Quality Data/Analysis • Photographs
<p>- 14 WATER QUALITY DEGRADATION – Excessive salts in surface and ground waters</p>	<p>Irrigation or rainfall runoff transports salts to receiving water in quantities that degrade water quality and limit use for intended purposes</p>	<ul style="list-style-type: none"> • All 	<p>Salt concentrations is not a limiting factor</p>	<p>Salt concentrations are managed to mitigate off-site transport to surface or ground waters</p>	<ul style="list-style-type: none"> • Client input / planner observation • Soil Test • Water Quality Data/Analysis

WATER

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
- 15 WATER QUALITY DEGRADATION – Petroleum, heavy metals and other pollutants transported to receiving waters	Heavy metals, petroleum and other pollutants are transported to receiving water sources in quantities that degrade water quality and limit use for intended purposes	<ul style="list-style-type: none"> • All 	Activities do not present the potential for contamination	Petroleum, heavy metals or other potential pollutants are stored and handled to avoid runoff or leaching	<ul style="list-style-type: none"> • Client input / planner observation • Photographs • 303(d) List • Water Quality Data/Analysis
- 16 WATER QUALITY DEGRADATION – Excessive sediment in surface waters	Off-site transport of sediment from sheet, rill, and gully erosion into surface water that threatens to degrade surface water quality and limit use for intended purposes	<ul style="list-style-type: none"> • Crop* • Developed Land* • Farmsteads* • Other Rural Land • Associated Ag Land • Designated Protected Area • Water • Pasture* 	Permanent ground cover > 90% and slope < 10% AND Classic gullies are not present AND Streams or shoreline are not on or adjacent to site	Upslope treatment and buffer practices address concentrated flows to water bodies AND SVAP2 - bank condition ≥ 5 AND Livestock and vehicle water crossings are stable AND Water erosion rate ≤ T	<ul style="list-style-type: none"> • Client input / planner observation • Photographs • RUSLE2 • KY Gully Tool • Stream Visual Assessment Protocol (SVAP2)
		<ul style="list-style-type: none"> • Forest* 	There are no untreated sources of erosion AND Streams or shoreline are not on or adjacent to site	Upslope treatment and buffer practices address concentrated flows to water bodies AND Heavy use areas are stable AND SVAP2 - bank condition ≥ 5	<ul style="list-style-type: none"> • Client input / planner observation • Photographs • Stream Visual Assessment Protocol (SVAP2)
- 17 WATER QUALITY DEGRADATION – Elevated water temperature	Surface water temperatures exceed State/Federal standards and/or limit use for intended purposes	<ul style="list-style-type: none"> • Crop • Forest • Pasture • Developed Land • Associated Ag Land • Designated Protected Area • Water • Other Rural Land • Farmsteads 	Water courses on or adjacent to the site are not designated by a State Agency as a temperature impairment OR Water course temperature is not a client concern	SVAP2 - riparian area quality element score ≥ 5 AND SVAP2 - riparian area quantity quality element score ≥ 5 AND SVAP2 - canopy cover element score ≥ 6 OR Existing conservation practices are in place to address water temperature	<ul style="list-style-type: none"> • Client input / planner observation • Stream Visual Assessment Protocol (SVAP2) • Water Quality Data/Analysis • 303(d) List

PLANT

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
<p>- 18 DEGRADED PLANT CONDITION – Undesirable plant productivity and health</p>	<p>Plant productivity, vigor and/or quality negatively impacts other resources or does not meet yield potential due to improper fertility, management or plants not adapted to site</p> <p>This includes addressing pollinators and beneficial insects.</p>	<ul style="list-style-type: none"> • Crop • Farmsteads • Developed Land • Designated Protected Area • Associated Ag Land • Other Rural Land 	<p>Plant production and health is not a client concern</p>	<p>Plants are adapted to the site, meet production goals and do not negatively impact other resources OR as identified by a qualified staff biologist (pollinators)</p>	<ul style="list-style-type: none"> • Client input / planner observation • Approved NRCS Pollinator Habitat Assessment
		<ul style="list-style-type: none"> • Pasture* 	<p>Plant production and health is not a client concern</p>	<p>KPCS - desirable plants element score ≥ 3 AND KPCS - plant cover element score ≥ 4 AND KPCS - plant vigor element score ≥ 4 AND Plants are adapted to the site, meet production goals and do not negatively impact other resources OR As identified by a qualified staff biologist (pollinators)</p>	<ul style="list-style-type: none"> • KPCS – Kentucky Pasture Condition Scoresheet (CPS 528) • Approved NRCS Pollinator Habitat Assessment
		<ul style="list-style-type: none"> • Forest 	<p>Plant production and health is not a client concern</p>	<p>Forest species are adapted to site AND Composition and stand density meets the client’s objectives and production goals OR As identified by a qualified staff biologist (pollinators)</p>	<ul style="list-style-type: none"> • Forest inventory data (plots and transect forms) • Forest Management Plans developed by qualified foresters • Approved NRCS Pollinator Habitat Assessment
<p>- 19 DEGRADED PLANT CONDITION – Inadequate structure and composition</p>	<p>Plant communities have insufficient composition and structure to achieve ecological functions and management objectives</p> <p>This includes degradation of wetland habitat, targeted ecosystems, or unique plant communities.</p>	<ul style="list-style-type: none"> • Forest • Designated Protected Area • Associated Ag Land • Water • Pasture 	<p>Plant communities support the intended land use and desired ecological functions</p>	<p>Plant communities contain adequate diversity, composition and structure to support desired ecological functions OR SVAP2 (riparian) Score of ≥ 6 on elements 4 & 5</p>	<ul style="list-style-type: none"> • Ecological Site Descriptions and soil survey data • Forest Management Plans developed by qualified foresters • Other reference plant/community data (e.g. university or government agency data based on research) • CPS 643 for possible ecological communities.

PLANT

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
<p>- 20 DEGRADED PLANT CONDITION – Excessive plant pest pressure</p>	<p>Excessive pest damage to plants including that from undesired plants, diseases, animals, soil borne pathogens, and nematodes</p> <p>This concern addresses <u>invasive plant, animal and insect species</u></p>	<ul style="list-style-type: none"> • Crop • Forest* • Farmsteads • Developed Land • Associated Ag Land • Designated Protected Area • Water • Other Rural Land 	<p>Plant productivity is not limited from pest pressure</p>	<p>Pest damage to plants are below economic or environmental thresholds or client-identified criteria AND Plant pests, including noxious and invasive species are managed to meet client objectives OR Implemented appropriate CAP (cropland)</p>	<ul style="list-style-type: none"> • Client input / planner observation • Invasive Species Advisory List • Other reference plant/community data (e.g. university or government agency data based on research)
<p>- 21 DEGRADED PLANT CONDITION– Wildfire hazard, excessive biomass accumulation</p>	<p>The kinds and amounts of fuel loadings - plant biomass - create wildfire hazards that pose risks to human safety, structures, plants, animals, and air resources</p>	<ul style="list-style-type: none"> • All 	<p>Wildfire hazard is not a concern</p>	<p>Fuel loads and fuel ladders are managed to provide defensible space and meet client objectives</p>	<ul style="list-style-type: none"> • Client input / planner observation AND photographs • Ecological Site Description • Other reference plant/community data (e.g. university or government agency data based on research)

ANIMAL

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
<p>- 22 INADEQUATE HABITAT FOR FISH AND WILDLIFE – Habitat degradation</p>	<p>Quantity, quality or connectivity of food, cover, space, shelter and/or water is inadequate to meet requirements of identified fish, wildlife or invertebrate species</p>	<p>All with “wildlife” modifier (Required when land use has a wildlife modifier)</p>	<p>Wildlife modifier not utilized</p>	<p>KWHEP score ≥ 0.5 AND (when surface stream present) SVAP2 – barriers to movement element score ≥ 7 AND SVAP2 – fish habitat complexity element score ≥ 7 AND SVAP2 – aquatic invertebrate habitat element score ≥ 7 AND The connectivity of habitat components is adequate to support stable populations of targeted species OR Conservation practices and management are in place that meet or exceed species or guild-specific habitat model thresholds (i.e. State approved HEP) OR Food, water, space and cover is of available quality and extent to support habitat requirements for the species of interest (as determined by a qualified staff biologist or State Biologist) OR Conservation practices are in place to mitigate pesticide hazard for pollinators</p>	<ul style="list-style-type: none"> • Kentucky Wildlife Habitat Evaluation Procedure (KWHEP) – utilize for upland wildlife • SVAP2 – utilize for fish & aquatic resources • Approved habitat models by selected species and habitat type • Approved NRCS Pollinator Habitat Assessment • AND • WinPST (as applicable)
<p>- 23 LIVESTOCK PRODUCTION LIMITATION – Inadequate feed and forage</p>	<p>Feed and forage quality or quantity is inadequate for nutritional needs and production goals of the kinds and classes of livestock</p>	<p>All with “grazed” modifier (Applicable when land use is grazed)</p>		<p>Livestock forage, roughage and supplemental nutritional requirements are addressed OR Livestock and forage needs are balanced OR Body Condition Score ≥ 5</p>	<ul style="list-style-type: none"> • Client input / planner observation, • KY GRAZE • AND (as appropriate): • KPCS – Kentucky Pasture Condition Scoresheet (CPS 528) • Body Condition Score (BCS)

ANIMAL

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
<p>- 24 LIVESTOCK PRODUCTION LIMITATION – Inadequate livestock shelter</p>	<p>Livestock lack adequate shelter from climatic conditions to maintain health or production goals</p>	<p>All with “grazed” modifier (Applicable when land use is grazed)</p>		<p>Artificial or natural shelters meets animal health needs and client objectives</p>	<ul style="list-style-type: none"> • Client input / planner observation
<p>- 25 LIVESTOCK PRODUCTION LIMITATION – Inadequate livestock water</p>	<p>Quantity, quality and/or distribution of drinking water are insufficient to maintain health or production goals for the kinds and classes of livestock</p>	<p>All with “grazed” modifier (Applicable when land use is grazed)</p>		<p>Water of acceptable quality and quantity is adequately distributed to meet animal needs</p>	<ul style="list-style-type: none"> • Client input / planner observation • 303(d) List • Water Quality Data/Analysis • <i>Land Grant University data</i>

ENERGY

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
<p>- 26 - INEFFICIENT ENERGY USE – Equipment and facilities</p>	<p>Inefficient use of energy in the Farm Operation increases dependence on non-renewable energy sources that can be addressed through improved energy efficiency and the use of on-farm renewable energy sources.</p> <p>As an example, this concern addresses inefficient energy use in pumping plants, on-farm processing, drying and storage.</p>	<ul style="list-style-type: none"> All 	<p>Client is not interested in improving equipment and facilities energy efficiency</p>	<p>A USDA approved energy audit been implemented that address equipment and facilities to meet client objectives OR On-farm renewable energy and/or energy conserving practices have been implemented to meet client objectives</p>	<ul style="list-style-type: none"> Client input / planner observation USDA approved Energy Audit NRCS Energy Estimator
<p>- 27 - INEFFICIENT ENERGY USE – Farming/ranching practices and field operations</p>	<p>Inefficient use of energy in field operations increases dependence on non-renewable energy sources that can be addressed through improved efficiency and the use of on-farm renewable energy sources.</p>	<ul style="list-style-type: none"> All 	<p>Client is not interested in improving energy use in farm and ranch field operations</p>	<p>A USDA approved energy audit been implemented that address field operations to meet client objectives OR On-farm renewable energy and/or energy conserving practices have been implemented to meet client objectives</p>	<ul style="list-style-type: none"> Client input / planner observation USDA approved Energy Audit NRCS Energy Estimator

AIR

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
<p>- 28 AIR QUALITY IMPACTS - Emissions of Particulate Matter - PM - and PM Precursors</p>	<p>Direct emissions of particulate matter - dust and smoke -, as well as the formation of fine particulate matter in the atmosphere from other agricultural emissions - ammonia, NOx, and VOCs - cause multiple environmental impacts, such as: - The unintended movement of particulate matter - typically dust or smoke - results in safety or nuisance visibility restriction - The unintended movement of particulate matter and/or chemical droplets results in unwanted deposits on surfaces - Increased atmospheric concentrations of particulate matter can impact human and animal health and degrade regional visibility</p>	<ul style="list-style-type: none"> • Crop • Pasture • Range • Forest • Other Rural Land • Associated Ag Land • Designated Protected Areas • Developed Land • Farmsteads 	<p>Activities are not present that contribute to agricultural source PM or PM precursor emissions PM Producing Activities:</p> <ul style="list-style-type: none"> • Prescribed Burn is conducted • Travel ways are unpaved or untreated with binding agents • Engines (combustion source) • Tillage • Pesticides are applied • Fertilization (manure /commercial) • CAFO/manure management) <p>AND</p> <p>Episodes or complaints of emissions of PM (dust, smoke, exhaust, etc.), or chemical drift have not occurred</p>	<p>PM and PM Precursor emissions are managed to meet client objectives</p>	<ul style="list-style-type: none"> • Client input / planner observation • National Air Quality Site Assessment Tool

RC	DESCRIPTION	LANDUSE	SCREENING CRITERIA	PLANNING CRITERIA	TOOL
<p>- 29 AIR QUALITY IMPACTS - Emissions of Greenhouse Gases - GHGs -</p>	<p>Emissions increase atmospheric concentrations of greenhouse gases.</p>	<ul style="list-style-type: none"> All 	<p>Activities are not present that produce GHGs emissions GHG Producing Activities:</p> <ul style="list-style-type: none"> Fertilization (manure/commercial) CAFO/manure management Engines (combustion source) Tillage <p>AND GHGs are not regulated in this planning area</p>	<p>Greenhouse gas emissions are managed to meet client objectives</p>	<ul style="list-style-type: none"> Client input / planner observation COMET-Farm National Air Quality Site Assessment Tool
<p>- 30 AIR QUALITY IMPACTS - Emissions of Ozone Precursors</p>	<p>Emissions of ozone precursors - NOx and VOCs - resulting in formation of ground-level ozone that cause negative impacts to plants and animals.</p>	<ul style="list-style-type: none"> All 	<p>Operations are not present that produce ozone or precursor emissions Ozone Producing Activities:</p> <ul style="list-style-type: none"> Engines (combustion source) Pesticide application Burning CAFO/manure management Fertilization (manure /commercial) 	<p>Ozone precursor emissions are managed to meet client objectives</p>	<ul style="list-style-type: none"> Client input / planner observation National Air Quality Site Assessment Tool
<p>- 31 AIR QUALITY IMPACTS - Objectionable odors</p>	<p>Emissions of odorous compounds - VOCs, ammonia and odorous sulfur compounds - cause nuisance conditions</p>	<ul style="list-style-type: none"> Crop Pasture Farmsteads Other Rural Land 	<p>Activities are not present that contribute to nuisance air quality conditions Nuisance Producing Activities:</p> <ul style="list-style-type: none"> Pesticide application CAFO / manure management Composting is conducted <p>AND Odor sources are not regulated in this planning area AND Episodes or complaints of emissions of PM (dust, smoke, exhaust, etc.), or chemical drift have not occurred</p>	<p>Odors are managed to meet client objectives</p>	<ul style="list-style-type: none"> Client input / planner observation National Air Quality Site Assessment Tool