

Table 1 National and State of Nebraska Resource Concerns and Quality Criteria

Natural Resource Concern	Description of Concern	National Quality Criteria	State Quality Criteria	Measurement Units	Assessment Tools for Quality Criteria Evaluation
AIR					
Air Quality - Particulate matter less than 10 micrometers in diameter (PM 10)	Particulate matter less than 10 micrometers in diameter are suspended in the air causing potential health hazards to humans and animals.	Land use and management operations reduce PM-10 emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and local regulations.	NA	Pounds/Year–average annual pounds of reduced PM-10 emissions for the field or planning area/unit	NA
Air Quality - Particulate matter less than 2.5 micrometers in diameter (PM 2.5)	Particulate matter less than 2.5 micrometers in diameter are suspended in the air causing potential health hazards to humans and animals.	Land use and management operations reduce PM-2.5 emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and local regulations.	NA	Pounds/Year–average annual pounds of reduced PM-2.5 emissions for the field or planning area/unit	NA
Air Quality - Excessive Ozone	High concentrations of ozone (O ₃) are adversely affecting human health, reducing plant yields, and leading to the creation of smog.	Land use and management operations reduce ozone precursors and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and local regulations.	NA	Pounds/Year–average annual pounds of reduced ozone precursors emissions for the field or planning area/unit	NA
Air Quality - Excessive Greenhouse Gas: CO₂ (carbon dioxide)	Increased CO ₂ concentrations are adversely affecting ecosystem processes.	Land use and management operations reduce CO ₂ emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and local regulations.	NA	Non Measurable	NA

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Air Quality - Excessive Greenhouse Gas: N₂O (nitrous oxide)	Increased N ₂ O concentrations are adversely affecting ecosystem processes.	Land use and management operations reduce N ₂ O emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and local regulations.	NA	Non Measurable	NA
Air Quality - Excessive Greenhouse Gas: CH₄ (methane)	Increased CH ₄ concentrations are adversely affecting ecosystem processes.	Land use and management operations reduce CH ₄ emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and local regulations.	NA	Non Measurable	NA
Air Quality - Ammonia (NH₃)	Animal waste and inorganic commercial fertilizers emit ammonia that contributes to odor, is a PM _{2.5} precursor, and contributes to acid rain.	Land use and management operations reduce NH ₃ emissions into the atmosphere and comply with requirements of all applicable Federal, Tribal, State, and local regulations.	NA	Pounds/Year—average annual pounds of reduced NH ₃ emissions for the field or planning area/unit	NA
Air Quality - Chemical Drift	Materials applied for pest control drift downwind and contaminate/injure non-targeted fields, crops, soils, water, animals and humans.	Land use and management operations reduce chemical drift into the atmosphere and comply with all applicable Federal, Tribal, State, and local regulations, and applicable label directions.	Same as National	Non Measurable	<ul style="list-style-type: none"> • Approved NRCS technical guidance and tools • Pest Management Standard • Pesticide application records • Product label

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Air Quality - Objectionable Odors	Land use and management operations produce offensive smells.	Odor-producing facilities and activities are planned and sited to mitigate potential nuisance impacts and meets all applicable Tribal, State, and Local regulations.	For animal feeding operations setbacks for facilities indicate low risk using the odor footprint tool from the University of Nebraska	Non Measurable	<ul style="list-style-type: none"> Odor Footprint Tool for Facility Siting and Odor Impact Assessment and Setback Estimation Tool (UNL)
Air Quality - Reduced Visibility	Sight distance is impaired due to airborne particles causing unsafe conditions and impeded viewing of natural vistas especially in Class I viewing areas (primarily national parks and monuments).	Land use and management operations reduce particle emission into the atmosphere and comply with all applicable Federal, Tribal, State, and local regulations, including State and local smoke and/or burn management plans.	Same as National	Non Measurable	<ul style="list-style-type: none"> Visual assessment Regional air partnership recommendations and/or state guidance for smoke management
Air Quality - Undesirable Air Movement	Wind velocities (too little or too much) reduce animal or plant productivity, impact human comfort and increase energy consumption.	Devices and practices are sited and planned to mitigate excess or deficient air movement.	NA	Non Measurable	NA
Air Quality - Adverse Air Temperature	Air temperatures (too cold or too hot) reduce animal or plant productivity, impact human comfort and increase energy consumption.	Devices and practices are planned and sited to mitigate temperature extremes.	NA	Non Measurable	NA