National and State 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**
SOIL					
Soil Erosion – Sheet and Rill	Detachment and transport of soil particles caused by rainfall splash and runoff degrade soil quality	Sheet and rill erosion does not exceed the Soil Loss Tolerance "T"	SAME AS NATIONAL	Tons/Acre/Year – average annual tons of erosion reduced per acre for the field or planning area/unit	RUSLE2
Soil Erosion – Wind	Detachment and transport of soil particles caused by wind degrade soil quality and/or damage plants.	Wind erosion does not exceed the Soil Loss Tolerance "T" or, for plant damage, does not exceed Crop Damage Tolerances.	N/A	Tons/Acre/Year – average annual tons of erosion reduced per acre for the field or planning area/unit	N/A
Soil Erosion – Ephemeral Gully	Small channels caused by surface water runoff degrade soil quality and tend to increase in size. On cropland, they can be obscured by heavy tillage.	Surface water runoff is controlled sufficiently to stabilize the small channels and prevent reoccurrence of new channels.	SAME AS NATIONAL	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit	Visual assessment Volume calculation
Soil Erosion – Classic Gully	Deep, permanent channels caused by the convergence of surface runoff degrade soil quality. They enlarge progressively by headcutting and lateral widening.	Surface water runoff is controlled sufficiently to stop progression of headcutting and widening.	SAME AS NATIONAL	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit.	Visual assessment Volume calculation Aerial photo trend analysis
Soil Erosion Streambank	Accelerated loss of streambank soils restricts land and water use and management	Accelerated streambank soil loss does not exceed a level commensurate with upstream land use and normal geomorphological processes on site.	Accelerated streambank soil loss does not exceed a level commensurate with upstream land use and normal geomorphological processes. Streambank erosion does not exceed acceptable levels of onsite or offsite damages.	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit.	Aerial photo trend analysis Engineering Field Handbook Chapter 16, Streambank and Shoreline Protection The Stream Corridor Restoration Handbook National Water and Climate Center Tech. Note 99-1: Stream Visual Assessment Protocol

National and State 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**
SOIL					
Soil Erosion – Shoreline	Soil is eroded along shorelines by wind and wave action, causing physical damage to vegetation, limiting land use, or creating a safety hazard.	Shoreline erosion is stabilized to a level that does not restrict the use or management of adjacent land, water or structures.	SAME AS NATIONAL	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit.	Visual assessment Aerial photo trend analysis Volume calculation Erosion transects/pins Engineering Field Handbook Chapter 16, Streambank and Shoreline Protection
Soil Erosion – Irrigation Induced	Improper irrigation water application and equipment operation are causing soil erosion that degrades soil quality.	Irrigation-induced erosion does not exceed the Soil Loss Tolerance "T".	Irrigation rates at or below soil intake rates. Irrigation-induced erosion does not exceed the Soil Loss Tolerance "T".	Tons/Acre/Year – average annual tons of erosion reduced per acre for the field or planning area/unit.	CPED (Center Pivot Evaluation and Design* National Engineering Handbook, Part 652, Irrigation Guide Soil Survey
Soil Erosion – Mass Movement	Soil slippage, landslides, or slope failure, normally on hillsides, result in large volumes of soil and rock movement.	Shallow slumps, slides, or slips are prevented or minimized so that the mass movement of earth material does not exceed naturally occurring rates.	Shallow slumps, slides, or slips are prevented or minimized so that the mass movement of soil material does not exceed naturally occurring or other acceptable rates for a specific land use condition.	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit	Visual assessment Aerial photo trend analysis Volume calculation
Soil Erosion – Road, Roadslides and Construction Sites	Soil loss occurs on areas left unprotected during or after road building and/or construction activities	Sites are adequately protected from soil loss during and after road building and construction activities.	SAME AS NATIONAL	Tons/Year – average annual tons of erosion reduced for the field or planning area/unit	Visual assessment Volume calculation RUSLE2
Soil Condition Organic Matter Depletion	Soil organic matter has lowered or will diminish to a level that degrades soil quality.	Soil Conditioning Index is positive.	SAME AS NATIONAL	Soil Conditioning Index improvement – positive improvement in index for the field or planning area/unit	Soil Conditioning Index Soil Quality Test Kit Soil testing and analysis Soil Quality Institute Publications List

National and State 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**
SOIL					
Soil Condition – Compaction	Compressed soil particles and aggregates caused by mechanical compaction adversely affect plant-soil-moisture relationships.	Mechanically compacted soils are renovated sufficiently to restore plant root growth and/or water movement.	SAME AS NATIONAL	Non Measurable	Assessment of plant root systems Soil Quality Test Kit Dial penetrometer Visual assessment Soil probes Soil Quality Institute Publications List
Soil Condition – Subsidence	Loss of volume and depth of organic soils due to oxidation caused by above normal microbial activity resulting from excessive drainage or extended drought.	The timing and regime of soil moisture is managed to attain acceptable subsidence rates.	SAME AS NATIONAL	Inches/Acre/Year – average annual inches of subsidence reduced per acre for the field or planning area/unit	Visual assessment Inventory of volume and depth Soil probes and witness poles
Soil Condition – Contaminants – Salts and Other Chemicals	Inorganic chemical elements and compounds such as salts, selenium, boron, and heavy metals restrict the desired use of the soil or exceed the soil buffering capacity.	Salinity levels cause less than a 10% decrease in plant yield. Other contaminants do not exceed plant tolerances or are below toxic levels for plants or animals.	SAME AS NATIONAL	Electrical Conductivity (EC) – average reduction in EC for the field or planning area/unit	Soil test Soil Quality Test Kit Soil Quality Institute Publications List

National and State 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**
SOIL					
Soil Condition – Contaminants – Animal Waste and Other Organics - Nitrogen	Nitrogen nutrient levels from applied animal waste and other organics restrict desired use of the land.	Nitrogen nutrient application levels do not exceed soil storage/plant uptake capacities based on soil test recommendations and risk analysis results.	SAME AS NATIONAL	Pounds/Acre/Year – average annual pounds of nitrogen (N) reduced per acre for the field or planning area/unit.	Soil Test Table 3, Chapter 7 Maine Nutrient Management Certification Manual N & P Manure Priority Matrix Plant Tissue Test Application records Yield records/history Soil Rating for Nitrate and Soluble Nutrients Soil Quality Institute Publications List
Soil Condition – Contaminants: Animal Waste and Other Organics – Phosphorus	Phosphorus nutrient levels from applied animal waste and other organics restrict desired use of the land.	Phosphorus nutrient application levels do not exceed soil storage/plant uptake capacities based on soil test recommendations and risk analysis results.	SAME AS NATIONAL	Pounds/Acre/Year – average annual pounds of phosphorus (P) reduced per acre for the field or planning area/unit.	Soil Test Maine Nutrient Management Certification Manual Chapter 7 Table 3 N & P Manure Priority Matrix Plant Tissue Test Application records Yield records/history Soil Rating for Nitrate and Soluble Nutrients Soil Quality Institute Publications List

National and State 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**
SOIL					
Soil Condition – Contaminants: Animal Waste and Other Organics – Potassium	Potassium nutrient levels from applied animal waste and other organics restrict desired use of the land.	Potassium nutrient application levels do not exceed soil storage/plant uptake capacities based on soil test recommendations and risk analysis results.	SAME AS NATIONAL	Pounds/Acre/Year – average annual pounds of potassium (K) reduced per acre for the field or planning area/unit.	Soil Test Maine Nutrient Management Certification Manual Chapter 7 Table 3 N & P Manure Priority Matrix Plant Tissue Test Application records Yield records/history Soil Rating for Nitrate and Soluble Nutrients Soil Quality Institute Publications List
Soil Condition – Contaminants: Commercial Fertilizer – Nitrogen	Over application of nitrogen degrades plant health and vigor or exceeds the soil capacity to retain nutrients.	Soil nutrient levels of nitrogen do not exceed crop needs based on realistic yield goals, and appropriate pH levels are maintained.	SAME AS NATIONAL	Pounds/Acre/Year – average annual pounds of nitrogen (N) reduced per acre for the field or planning area/unit.	Soil Test Soil Rating for Nitrate and Soluble Nutrients Soil Quality Test Kit Soil Quality Institute Publications List
Soil Condition – Contaminants; Commercial Fertilizer – Phosphorus	Over application of phosphorus degrades plant health and vigor or exceeds the soil capacity to retain nutrients.	Soil nutrient levels of phosphorus do not exceed crop needs based on realistic yield goals, and appropriate pH levels are maintained.	SAME AS NATIONAL	Pounds/Acre/Year – average annual pounds of phosphorus (P) reduced per acre for the field or planning area/unit	Soil Test Soil Rating for Nitrate and Soluble Nutrients Soil Quality Test Kit Soil Quality Institute Publications List
Soil Condition – Contaminants: Commercial Fertilizer – Potassium	Over application of potassium degrades plant health and vigor or exceeds the soil capacity to retain nutrients.	Soil nutrient levels of potassium do not exceed crop needs based on realistic yield goals, and appropriate pH levels are maintained.	SAME AS NATIONAL	Pounds/Acre/Year – average annual pounds of potassium (K) reduced per acre for the field or planning area/unit	Soil Test Soil Rating for Nitrate and Soluble Nutrients Soil Quality Test Kit Soil Quality Institute Publications List

National and State 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**
SOIL					
Soil Condition – Contaminants: Residual Pesticides	Residual pesticides in the soil have an adverse effect on non-targeted plants and animals	Pesticides are applied, stored, handled, and disposed of, so that residues in the soil do not adversely affect non-targeted plants and animals.	Pesticides are applied, stored, handled, and disposed of according to the product label so that residues in the soil do not adversely affect non-target plants and animals.	Non Measurable	Visual Assessment WIN-PST* Soil Test Plant and animal tissue test Soil Quality Institute Publications List
Soil Condition – Damage from Sediment Deposition	Sediment deposition damages or restricts land use/management or adversely affects ecological processes.	Sediment deposition is sufficiently reduced to maintain desired land use/management and ecological processes.	SAME AS NATIONAL	Acres/Year – average annual acres of sediment deposition reduced for the field or planning area/unit	Visual assessment Volume calculation Plant and animal community assessment Soil Quality Institute Publications List

National and State 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**
WATER					
Water Quantity – Excessive Seepage	Subsurface water oozing to the surface restricts land use and management.	Subsurface water is managed to limit periods of saturation that are unfavorable to the present or intended land use. Management complies with wetland policies.	SAME AS NATIONAL	Acres/Year – average annual acres of seep reduced for the field or planning area/unit.	Visual Assessment (physical presence of water, prevalence of hydrophytic vegetation, etc.) Client interview Area measurements Hydric soil investigation
Water Quantity – Excessive Runoff, Flooding, or Ponding	The land becomes inundated restricting land use and management.	Excess water amounts and/or rates of flow are controlled consistent with desired present or intended land use goals and wetland policies.	SAME AS NATIONAL	Non Measurable	Visual Assessment Client interview Stream Visual Assessment Protocol National Engineering Handbook EFH – Chapter 2 and 3) Hydrologic models, e.g., HECRAS, TR-20, TR-55
Water Quantity – Excessive Subsurface Water	Water saturates upper soil layers restricting land use and management.	Subsurface water is managed to limit periods of saturation compatible with the present or intended land use and wetland policies.	SAME AS NATIONAL	Non Measurable	Visual Assessment of soil cores and coring holes Plant quality and quantity measurements National Engineering Handbook, Part 650 (EFH-Chapter 14) Hydric soil investigations

National and State 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**
WATER					
Water Quantity – Drifted Snow	Wind-blown snow forms deposits and accumulates around and over surface structures restricting ingress, egress and conveyance of humans and animals.	Snowdrifts are reduced or prevented so as to allow ingress, egress, and conveyance of humans and animals.	SAME AS NATIONAL	Non Measurable	Visual assessment Client Interview Depth and area measurements
Water Quantity – Inadequate Outlets	Natural or constructed outlet too small to remove excess water In a timely manner.	Outlets are designed, installed, upgraded or maintained to adequately convey water for present or intended uses.	Outlets are designed, installed, upgraded or maintained to adequately convey water for present or intended uses consistent with desired present or intended land use goals and wetland policies.	Non Measurable	Visual Assessment Client interview National Engineering Handbook, part 650 (EFH – Chapters 2,3,7) Hydrologic models, e.g., HECRAS, TR-20, TR-55*
Water Quantity – Inefficient Water Use on Irrigated Land	Limited water supplies are not optimally utilized.	Land and water management is planned and coordinated to provide optimal use of natural and applied moisture.	SAME AS NATIONAL	Acre-Inches/Acre/Year – average annual acre-inches of water per acre used more beneficially for the field or planning area/unit.	Visual assessment National Engineering Handbook, Part 652, Irrigation Guide Crop quality and quantity measurements
Water Quantity – Inefficient Water Use on Non-Irrigated Land	Natural moisture is not optimally utilized.	Management provides optimum use of natural moisture for the present or intended land use.	SAME AS NATIONAL	Acre-Inches/Acre/Year – average annual acre-inches of water per acre used more beneficially for the field or planning area/unit	Visual assessment Plant or animal quality and quantity measurements
Water Quantity – Reduced Capacity of Conveyances by Sediment Deposition	Sediment deposits in ditches, canals, culverts, and other water conveyances reduce the desired flow capacity.	Conveyance structures are upgraded or maintained to adequately convey water for present or intended uses.	SAME AS NATIONAL	Cubic yards – volume of sediment in cubic yards removed to maintain water conveyances for the field or planning area/unit.	Visual assessment Client interview National Engineering Handbook, part 650 (EFH – Chapters 2,3,7) Hydrologic models, e.g., HECRAS, TR-20, TR-55*

National and State 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**
WATER					
Water Quantity – Reduced Storage of Water Bodies by Sediment Accumulation	Sediment deposits in water bodies reduce the desired volume capacity.	Water bodies and contributing source areas are treated to allow sufficient water storage for present and intended uses.	SAME AS NATIONAL	Acre-Inches/Year – average annual reduction in acre-inches in sediment deposition within water bodies for the field or planning area/unit.	Visual assessment Depth and area measurements National Engineering Handbook, Part 650 (EFH-Chapters 2,3,7,11)
Water Quantity – Aquifer Overdraft	Water withdrawals exceed the safe yield for the aquifer.	Land and water management are coordinated to balance aquifer recharge and withdrawals to maintain the safe yield for the aquifer.	SAME AS NATIONAL	Acre-Inches/Year – average annual reduction in acre-inches of groundwater overdraft for the field or planning area/unit.	Water level measurements
Water Quantity – Insufficient Flows in Water Courses	Water flows are not consistently available in sufficient quantities to support ecological processes and land use and management	Authorized uses and management of water are coordinated to minimize the impacts on water course flows.	SAME AS NATIONAL	Non Measurable	Visual assessment Water flow records USGS Gauge Station data Consumptive use/allocation water rights Tech. Note 99-1: Stream Visual Assessment Protocol Wildlife Habitat Evaluation Procedures National Biology Manual National Biology Handbook
Water Quality – Harmful Levels of Pesticides in Groundwater	Residues resulting from the use of pest control chemicals degrade groundwater quality.	Pesticides are applied, stored, handled, disposed of, and managed so that groundwater uses are not adversely affected.	Pesticides are applied, stored, handled, disposed of according to product label and managed so that groundwater uses are not adversely affected.	Non Measurable	WIN-PST* (Windows Pesticide Screening Tool-USDA/NRCS) Vadose zone and groundwater chemical sampling and assay

National and State 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**
WATER					
Water Quality – Excessive Nutrients and Organics in Groundwater	Pollution from natural or human induced nutrients such as N, P, and S (including animal and other wastes) degrades surface water quality.	Nutrients and organics are stored, handled, disposed of, and managed so that surface water uses are not adversely affected.	Nutrients and organics are stored, handled, disposed of, and applied such that groundwater uses are not adversely affected. Application of nutrients and organics are in balance with plant requirements, considering all nutrient sources, soil characteristics, optimum yields and climatic factors	Non Measurable	National Engineering Handbook, Part 651, Ag Waste Field Handbook Soil Rating for Nitrate and Soluble Nutrients N&P Manure Priority Matrix Vadose zone and groundwater chemical/particle sampling and assay Soil Tests Manure/organic analysis
Water Quality – Excessive Salinity in Groundwater	Pollution from salts such as Ca, MG, Na, $HC0_3$-, $C0_3$, CI, and SO_4^2- degrades groundwater quality.	Salts are stored, handled, disposed of, applied, and managed so that groundwater uses are not adversely affected.	SAME AS NATIONAL	Electrical Conductivity (EC) – average reduction in EC for the field or planning area/unit	Vadose zone and groundwater salinity sampling (total dissolved solids (TDS) or electrical conductivity) and assay National Engineering Handbook, Part 652, Irrigation Guide Soil salinity sampling and assay
Water Quality – Harmful Levels of Heavy Metals in Groundwater	Natural or human-induced metal pollutants present in toxic amounts degrade groundwater quality.	Materials containing heavy metals are stored, handled, disposed of, applied, and managed so that groundwater uses are not adversely affected.	SAME AS NATIONAL	Non Measurable	Vadose zone and groundwater chemical sampling and assay
Water Quality – Harmful Levels of Pathogens in Groundwater	Kinds and numbers of viruses, protozoa, and bacteria are present at a level that degrades groundwater quality.	Materials that harbor pathogens are stored, handled, disposed of, applied, and managed so that groundwater uses are not adversely affected.	SAME AS NATIONAL	Non Measurable	Vadose zone and groundwater chemical sampling and assay

National and State 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**
WATER					
Water Quality – Harmful Levels of Petroleum in Groundwater**	Fuel, oil, gasoline and other hydrocarbons present in toxic amounts degrade groundwater quality. **	Petroleum products are used, stored, handled, disposed of, and managed so that groundwater uses are not adversely affected. **	SAME AS NATIONAL **	Non Measurable **	Vadose zone and groundwater chemical sampling and assay **
Water Quality – Harmful Levels of Pesticides in Surface Water	Pest control chemicals present in toxic amounts degrade surface water quality.	Pesticides are applied, stored, handled, disposed of, and managed such that surface water uses are not adversely affected.	Pesticides are applied, stored, handled, disposed of according to the product label and managed such that surface water uses are not adversely affected.	Non Measurable	WIN-PST* (Windows Pesticide Screening Tool-USDA/NRCS) Surface water chemical sampling assay
Water Quality – Excessive Nutrients and Organics in Surface Water	Pollution from natural or human induced nutrients such as N, P, S (including animal and other wastes) degrades surface water quality.	Nutrients and organics are stored, handled, disposed of, and managed so that surface water uses are not adversely affected.	Nutrients and organics are stored, handled, disposed of according to the manure/organic analysis and managed such that surface water uses are not adversely affected.	Non Measurable	Technical Note 99-1: Stream Visual Assessment Protocol ME NRCS Habitat Evaluation Procedures N & P Manure Priority Matrix National Engineering Handbook, Part 651, Ag Waste Field Handbook Soil Rating for Nitrate and Soluble Nutrients Surface water chemical/particle sampling and assay Soil Test Manure/Organic analysis

**Obvious Resource Concerns related to fuel storage and handling should be identified and communicated to land owner/operator. However, technical assistance to address these concerns shall be obtained from non-NRCS sources. See NB 450-8-12 dated 6/19/08.

National and State 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**
WATER					
Water Quality – Excessive Suspended Sediment and Turbidity in Surface Water	Excessive concentrations of mineral or organic particles, algae, or organic stains degrade surface water quality.	Delivery or suspension of mineral and organic particles, and excessive algae growth or organic stains, is managed such that surface water uses are not adversely affected.	SAME AS NATIONAL	Non Measurable	Visual Assessment Client interview Technical Note 99-1: Stream Visual Assessment Protocol ME NRCS Habitat Evaluation Procedures National Handbook of Water Quality Monitoring Surface water chemical/particle sampling and assay
Water Quality – Excessive Salinity in Surface Water	Pollution from salts such as Ca, Mg, Na, K, HCO_3, CO_3, Cl and SO_4 degrades surface water quality.	Salts are stored, handled, disposed of, applied, and managed so that surface water uses are not adversely affected.	SAME AS NATIONAL	Electrical Conductivity (EC) – average reduction in EC for the field or planning area/unit.	Technical Note 99-1: Stream Visual Assessment Protocol National Handbook of Water Quality Monitoring
Water Quality – Harmful Levels of Heavy Metals in Surface Water	Natural or human-induced metal pollutants are present in toxic amounts that degrade surface water quality.	Materials containing heavy metals are stored, handled, disposed of, applied, and managed so that surface water uses are not adversely affected.	SAME AS NATIONAL	Non Measurable	Surface water chemical sampling and assay National Handbook of Water Quality Monitoring
Water Quality – Harmful Temperatures of Surface Water	Undesired thermal conditions degrade surface water quality.	Use and management of land and water are coordinated to minimize impacts on surface water temperatures.	SAME AS NATIONAL	Non Measurable	Technical Note 99-1: Stream Visual Assessment Protocol Wildlife Habitat Information Surface water temperature sampling and assay
Water Quality – Harmful Levels of Pathogens in Surface Water	Kinds and numbers of viruses, protozoa, and bacteria are present at a level that degrades surface water quality.	Materials that harbor pathogens are stored, handled, disposed of, applied, and managed so that surface water uses are not adversely affected.	SAME AS NATIONAL	Non Measurable	Surface water pathogen sampling and assay

National and State 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**
WATER					
Water Quality – Harmful Levels of Petroleum in Surface Water	Fuel, oil, gasoline, and other hydrocarbons present in toxic amounts degrade surface water quality. **	Petroleum products are used, stored, handled, and disposed of so that groundwater uses are not adversely affected. **	SAME AS NATIONAL **	Non Measurable **	Surface water chemical sampling and assay**
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.	SAME AS NATIONAL	Pounds/Year – average annual pounds of reduced PM-10 emissions for the field or planning area/unit	Specific guidelines contained in State of Federal Implementation Plan; or other approved NRCS tool Maine DEP Air Bureau Chapter 110 "Ambient Air Quality Stds" Air quality analysis
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.	N/A	Pounds/Year – average annual pounds of reduced PM 2.5 emissions for the field or planning area/unit.	No guidelines currently exist for PM 2.5 in the Federal or Maine's State Implementation plan.
Air Quality Excessive Ozone	High concentrations of ozone are adversely affecting human health, reducing plant yields, and creating 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.	SAME AS NATIONAL	Pounds/Year – average annual pounds of reduced ozone precursors emissions for the field or planning area/unit.	Specific guidelines contained in State or Federal Implementation Plan; or other approved NRCS tools Maine DEP Air Bureau Chapter 110 "Ambient Air Quality Stds"

** Obvious Resource Concerns related to fuel storage and handling should be identified and communicated to landowner/operator. However, technical assistance to address these concerns shall be obtained from non-NRCS sources. See NB 450-5-12 dated 3/28/05.

National and State 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 – Excessive Greenhouse Gas: CO_2 (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.	N/A	Non Measurable	No guidelines currently exist for CO_2 in the Federal or Maine's State Implementation plan.
Air Quality – Excessive Greenhouse Gas: N_2O (nitrous oxide)	Increased N_2O concentrations are adversely affecting ecosystem processes.	Land use and management operations reduce N_2O emissions into the atmosphere and comply with requirements of the State or Federal Implementation Plan and all applicable Federal, Tribal, State, and local regulations.	SAME AS NATIONAL	Non Measurable	Maine DEP Air Bureau Chapter 110 "Ambient Air Quality Stds"
Air Quality – Excessive Greenhouse Gas: CH_4 (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.	SAME AS NATIONAL	Non Measurable	Maine DEP Air Bureau Chapter 110 "Ambient Air Quality Stds"

National and State 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 Ammonia (NH_3)	Animal waste and inorganic commercial fertilizers emit ammonia that contributes to odor, is a PM2.5 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	N/A	Pounds/Year – average annual pounds of reduced NH_3 emissions for the field or planning area/unit	No Federal or state guidelines currently exist for NH_3
Air Quality – Chemical Drift	Materials applied to control pests 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	Approved NRCS technical guidance and tools Visual Assessment
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 meet all applicable Tribal, State, and local regulations.	SAME AS NATIONAL	Non Measurable	Visual Assessment National Engineering Handbook, Part 651, Ag Waste Field Handbook NRCS approved tools.

National and State 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 – 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	Visual Assessment Regional air partnership recommendations and/or state guidance for smoke management Maine DEP Air Bureau Chapter 115 "Major and Minor Source Air Emission License Regulations" Maine DEP Air Bureau Chapter 140 "Air Emissions License Regulations" Maine DEP Air Bureau Title 38, Chapter 4, Paragraph 590 part 7 "Compliance with Federal Law" Maine DEP Air Bureau Chapter 102 "Open Burning"
Air Quality – Undesirable Air Movement	Wind velocities (too little or too much) reduce animal or plant productivity, impact human comfort and increase energy consumption.	Land use and management operations mitigate excessive or deficient air movement.	SAME AS NATIONAL	Non Measurable	Visual Assessment Anemometers Approved NRCS technical guidance and tools
Air Quality – Adverse Air Temperature	Air temperatures (too cold or too hot) reduce animal or plant productivity, impact human comfort and increase energy consumption.	Land use and management operations mitigate temperature extremes.	SAME AS NATIONAL	Non Measurable	Chill factor indices; heat indices Air temperature assessment

National and State 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**
PLANT					
Plants not adapted or suited	Plants are not adapted and/or suited to site conditions or client objectives.	Selected plants are adapted to the soil and climatic conditions, or the site is modified to make it suitable for the desired plants. Plants are sustainable, do not negatively impact other resources, and meet client objectives. For specific land uses, additional criteria apply: **Cropland:** A healthy stand with vigorous growth. Yields 75% of client expectations. **Pastureland:** Plants on or planned for the site have a site adaptation score greater than 3 using Pasture Condition Scoring (PCS) and are listed in applicable Forage Suitability Groups (FSG) reports. **Hayland:** Plants on or planned for the site are listed in applicable Forage Suitability Groups (FSG) reports. **Forestland/Agroforest:** Plants on or planned for the site are listed in Ecological Site Descriptions (ESD).	Selected plants are adapted to the soil and climatic conditions or the site is modified to make it suitable for the desired plants. Plants are sustainable, do not negatively impact other resources, and meet client objectives. For specific land uses, additional criteria apply: **Cropland:** A healthy stand with vigorous growth. Yields 75% of client expectations. **Pastureland:** Plants on or planned for the site have a site adaptation score greater than 3 using Pasture Condition Scoring (PCS) **Hayland:** A healthy stand with vigorous growth. Yields 75% of client expectations. **Forestland/Agroforest:** Plants on or planned for the site are listed on Natural Community Types in Maine listing by ME Dept of Conservation.	Non Measurable	On-site investigation and records Pasture Condition Scoring (PCS) Client interview PLANTS database VEGSPEC Seeding and Planting Guide Plant hardiness zone map Soil pH, drainage class Soil interpretations – Section II of eFOTG Local agronomy guides University of Maine Extension Service information Soil survey manuscripts Conservation Tree and Shrub database (Sec I, eFOTG) Silvics of North America Trees National Agronomy Manual Forestry Manual and Handbook Biology Manual and Handbook National Range and Pasture Handbook Inventory of site Forest Management Plan Consultation with licensed consulting forester or MFS district forester Invasive Plant Atlas of New England: Invasive and noxious species lists http://invasives.eeb.uconn.edu/ipane/ipanespecies/ipanespecies.htm

National and State 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**
			PLANT		
Plant Condition – Productivity, Health and Vigor	Plants do not produce the yields, quality, and soil cover to meet client objectives.	Selected plants on or planned for the site are sufficiently productive to meet or exceed client needs. For specific land uses, additional criteria apply: **Cropland:** A healthy stand with vigorous growth produces at least 75% of site potential. **Rangeland:** The plant community has a similarity index of at least 60% or an upward trend for similarity indices less than 60%. **Pastureland:** Forage yields are at least 75% of high management estimates cited in Forage Suitability Groups (FSG) reports. **Hayland:** Forage yields are at least 75% of high management estimates cited in FSG reports. **Forestland/Agroforest:** Forests consist of healthy stands with vigorous growth having a stand density within 25% of optimum stocking on a stems/acre basis. Plants chosen for Agroforest applications are consistent with Conservation Tree and Shrub Groups (CTSG) listings and height performance.	Selected plants on or planned for the site are sufficiently productive to meet or exceed client needs. For specific land uses, additional criteria apply: **Cropland:** A healthy stand with vigorous growth produces at least 75% of site potential. **Pastureland:** Plants on the site have a site adaptation score greater than 3 using Pasture Condition Scoring (PCS). **Hayland:** A healthy stand with vigorous growth. Yields 75% of client expectations. **Forestland/Agroforest:**Forests consist of healthy stands with vigorous growth having a stand density within 25% of optimum stocking on a stems/acre basis. Plants chosen for agroforest applications are consistent with Conservation Tree and Shrub Database listings and height performance.	Non Measurable	Local agronomy guides Client interview Plant tissue and harvest analysis Crop scouting National Forestry Handbook National Biology Handbook National Range and Pasture Handbook Rising plate meter Plot sampling of understory vegetation Soil survey reports Soil Testing Crop/soil yield comparison in the vicinity Pasture Condition Scoring (PCS) Keys for disease and insect symptoms Keys for nutrient and deficiencies, toxicities, and other conditions Stocking rate of desired species Plot sampling of vegetation Stocking measurement for the tree stands Conservation Tree and Shrub database (Sec I, eFOTG) Inventory of site Forest Management Plan Consultation with licensed consulting forester or MFS district forester

National and State 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**
PLANT					
Plant Condition – Threatened or Endangered Plant Species: Plant Species Listed or Proposed for Listing under the Endangered Species Act	The site includes individuals, habitat or potential habitat for one or more plant species listed or proposed for listing under the Endangered Species Act.	Populations and/or habitats of Threatened and Endangered plant species are managed to maintain, increase or improve current populations, health, or sustainability.	SAME AS NATIONAL	Non Measurable	National Environmental Compliance Handbook ME NRCS policy on evaluating special concern species and habitats ESA Section 7 consultations with appropriate federal agencies
Plant Condition – Threatened or Endangered Plant Species: Declining Species, Species of Concern	The site includes individuals, habitat or potential habitat for one or more plant species that the State or Tribal government with jurisdiction, or the State Technical Committee, has identified as a species of concern. This includes plant species that have been identified as candidates for listing under the Endangered Species Act.	Populations and/or habitats of plant species of concern are managed to maintain, increase, or improve current populations, health or sustainability.	SAME AS NATIONAL	Non Measurable	National Environmental Compliance Handbook ME NRCS policy on evaluating special concern species and habitats Consultations with appropriate state or federal agencies

National and State 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**
PLANT					
Plant Condition – Noxious and Invasive Plants	The site has noxious or invasive plants present.	The site is managed to control noxious and invasive plants and to minimize their spread.	SAME AS NATIONAL	Non Measurable	Client interviews Inventory site Consult weed management associations Consultation with appropriate federal, state, and local agencies/groups Federal, state or local noxious weed lists - National Invasive Species Council http://www.invasivespecies.gov/ - Invasive Plant Atlas of New England: Invasive and noxious species lists: http://webapps.lib.uconn.edu/ipane/search.cfm - Aquatic Nuisance Species: http://anstaskforce.gov/ PLANTS database
Plant Condition – Forage Quality and Palatability	Plants do not have adequate nutritive value or palatability for the intended use.	Forage plants are managed to produce the desired nutritive value and palatability for the intended use.	SAME AS NATIONAL	Non Measurable	Plant tissue analysis NIRS/Nutritional Balance Profile Program (NUTBAL Pro)*
Plant Condition – Wildfire Hazard	The kinds and amounts of fuel loadings (plant biomass) pose risks to human safety, structures, and resources, should wildfire occur.	Fuel loadings are reduced and/or isolated to meet client needs in minimizing the risk and incidence of wildfire.	SAME AS NATIONAL	Acres/Year – average annual acres protected from wildfire for the field of planning area/unit.	Visual assessment protocols Site and flammable biomass inventories Aerial photo analysis

National and State 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**
ANIMAL					
Fish and Wildlife – Inadequate Food	Quantity and quality of food are unavailable to meet the life history requirements of the species or guild of species of concern.	Food availability meets the life history requirements of the species or guild of species of concern.	Wildlife habitat evaluation procedures for species of concern yield an index of 0.5 or greater where wildlife is a secondary concern and a 0.7 or greater where wildlife is the primary concern.	Non Measurable; based on wildlife habitat evaluation procedures	ME NRCS Wildlife Habitat Evaluation Procedures Technical Note 99-1: Stream Visual Assessment Protocol USFWS Species Habitat Suitability Indexes http://www.nwrc.usgs.gov/wdb/pub/hsi/hsiintro.htm National Biological Technical Notes Aerial photo analysis National Biology Manual National Biology Handbook
Fish and Wildlife Inadequate Cover/Shelter	Cover/shelter for the species of concern is unavailable or inadequate. This includes lack of hiding, thermal, and/or refuge cover.	The ecosystem or habit types support the necessary plant species in support over time, the adequate diversity, abundance, and physical structure, and the connectivity of fish and wildlife cover is adequate to support, over time, the species or guild of species of concern.	Wildlife habitat evaluation procedures for species of concern yield an index of 0.5 or greater where wildlife is a secondary concern and a 0.7 or greater where wildlife is the primary concern.	Non Measurable; based on wildlife habitat evaluation procedures	ME NRCS Wildlife Habitat Evaluation Procedures Technical Note 99-1: Stream Visual Assessment Protocol USFWS Species Habitat Suitability Indexes http://www.nwrc.usgs.gov/wdb/pub/hsi/hsiintrol.htm National Biological Technical Notes Aerial photo analysis National Biology Manual National Biology Handbook
Fish and Wildlife Inadequate Water	The quantity and quality of water is unacceptable for the species or guild of species of concern.	The quantity and quality of water meets the life history requirements of the species or guild of species of concern.	Wildlife habitat evaluation procedures for species of concern yield an index of 0.5 or greater where wildlife is a secondary concern and a 0.7 or greater where wildlife is the primary concern.	Non Measurable; based on wildlife habitat evaluation procedures	ME NRCS Wildlife Habitat Evaluation Procedures USFWS Species Habitat Suitability Indexes http://www.nwrc.usgs.gov/wdb/pub/hsi/hsiintro.htm National Biological Technical Notes Surface water dissolved oxygen sampling and assay Technical Note 99-1: Stream Visual Assessment Protocol Inventory of water supplies Aerial photo analysis National Biology Manual National Biology Handbook
Fish and Wildlife Inadequate Space	Lack of required areas disrupts the life history of the species or guild of species of concern.	Area is adequate to meet life history requirements of the species or guild of species of concern. (Examples: staging areas for rest and feeding, lekking areas for breeding, migratory movement corridors.)	Wildlife habitat evaluation procedures for species of concern yield an index of 0.5 or greater where wildlife is a secondary concern and a 0.7 or greater where wildlife is the primary concern.	Non Measurable; based on wildlife habitat evaluation procedures	ME NRCS Wildlife Habitat Evaluation Procedures USFWS Species Habitat Suitability Indexes http://www.nwrc.usgs.gov/wdb/pub/hsi/hsiintro.htm National Biological Technical Notes Technical Note 99-1 Stream Visual Assessment Protocol Inventory of space/areas Aerial photo analysis National Biology Manual National Biology Handbook

National and State 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**
ANIMAL					
Fish and Wildlife Habitat Fragmentation	Habitat has insufficient structure, extent, and connectivity to provide ecological functions and/or achieve management objectives.	Fish and wildlife habitats are connected and are maintained sufficiently to support the species or guild of species of concern.	Wildlife habitat evaluation procedures for species of concern yield an index of 0.5 or greater where wildlife is a secondary concern and a 0.7 or greater where wildlife is the primary concern.	Non Measurable; based on wildlife habitat evaluation procedures	ME NRCS Wildlife Habitat Evaluation Procedures USFWS Species Habitat Suitability Indexes http://www.nwrc.usgs.gov/wdb/pub/hsi/hsiintro.htm National Biological Technical Notes Technical Note 99-1: Stream Visual Assessment Protocol Aquatic and terrestrial habitat evaluation Procedures National Biology Handbook National Biology Manual
Fish and Wildlife – Imbalance Among and Within Populations	Populations are not in proportion to available quantities and qualities of food (plants, predator/prey), cover/shelter, water, and space and other life history requirements.	Land and water use and management are consistent with direct population management activities conducted by fish and wildlife agencies.	Wildlife habitat evaluation procedures for species of concern yield an index of 0.5 or greater where wildlife is a secondary concern and a 0.7 or greater where wildlife is the primary concern.	Non Measurable; based on wildlife habitat evaluation procedures	ME NRCS Wildlife Habitat Evaluation Procedures USFWS Species Habitat Suitability Indexes http://www.nwrc.usgs.gov/wdb/pub/hsi/hsiintrol.htm National Biological Technical Notes Technical Note 99-1: Stream Visual Assessment Protocol National Biology Handbook National Biology Manual
Fish and Wildlife – Threatened and Endangered Fish and Wildlife Species: Fish and Wildlife Species Listed or Proposed for Listing under the Endangered Species Act.	The site includes individuals, habitat or potential habitat for one or more fish or wildlife species listed or proposed for listing under the Endangered Species Act.	Populations and/or habitats of Threatened and endangered fish and wildlife species and/or habitats they occupy are managed to maintain, increase, or improve current populations, health, or sustainability.	SAME AS NATIONAL	Non Measurable	ME NRCS policy on evaluating special concern species and habitats ESA Section 7 consultation with appropriate federal agencies National Environmental Compliance Handbook National Biology Manual National Biology Handbook

National and State 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**
ANIMAL					
Fish and Wildlife – Threatened and Endangered Species: Declining Species, Species of Concern	The site includes individuals, habitat or potential habitat for one or more fish or wildlife species that the State or Tribal government with jurisdiction, or the State Technical Committee, has identified as a species of concern. This includes fish and wildlife species that have been identified as candidates for listing under the Endangered Species Act.	Populations and/or habitats of fish and wildlife species of concern are managed to maintain, increase, or improve current populations, health, or sustainability.	SAME AS NATIONAL	Non Measurable	ME NRCS policy on evaluating special concern species and habitats Consultation with appropriate state and/or federal agencies MDIFW, Endangered and Threatened Wildlife: http://www.state.me.us/ifw/wildlife/etweb/state_federal_list.htm *Threatened and Endangered Species in Maine: A guide to assist with forestry activities* National Environmental Compliance Handbook National Biology Manual National Biology Handbook
Domestic Animals – Inadequate Quantities and Quality of Feed and Forage	Total feed and forage is insufficient to meet the nutritional and production needs of the kinds and classes of livestock.	Feed and forage including supplemental nutritional requirements are provided to meet production goals for the kinds and classes of livestock. Native grazers are factored into the total feed and forage balance computations.	SAME AS NATIONAL	Non Measurable	Measured Inventory National Range and Pasture Handbook Forage quality laboratory analysis NIRS/Nutritional Balance Profile Program (NUTBAL Pro)* Other State adapted forage/livestock management software and job sheets Pasture Condition Scoring (PCS)
Domestic Animals – Inadequate Shelter	Livestock are not protected sufficiently to meet the production goals for the kinds and classes of livestock.	Artificial and/or natural shelter is provided to meet production goals for the kinds and classes of livestock.	SAME AS NATIONAL	Non Measurable	Visual Assessment Inventory of facilities and their capacities Aerial photo analysis National Range of Pasture Handbook

National and State 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**
ANIMAL					
Domestic Animals – Inadequate Stock Water	The quantity, quality and distribution of drinking water are insufficient to meet the production goals for the kinds and classes of livestock.	Sufficient water of acceptable quality is provided and adequately distributed to meet production goals for the kinds and classes of livestock. To reduce potential for water contamination, watering facilities are constructed or modified to minimize mortality to wildlife.	SAME AS NATIONAL	Non Measurable	Visual Assessment Inventory of distribution needs Aerial photo analysis National Range and Pasture Handbook
Domestic Animals – Stress and Mortality	Animals exhibit illness or death from disease, parasites, insects, poisonous plants, or other factors	Land and water use and management are consistent with activities conducted to alleviate stress and mortality factors.	SAME AS NATIONAL	Non Measurable	Animal health/mortality alerts State and local biosecurity protocols State and local standards for animal disposal

Additional considerations useful in the RMS planning process include economic, social or cultural resource factors. The differing economic, social or cultural resource situations of a decision maker will determine the type of degree of treatment attained at any point in time. Where an RMS is not attainable at the present time, the progressive planning process (the incremental process of building a plan consistent with the decision maker's ability to plan and implement) may be used to ultimately achieve an RMS. The progression on individual planning units is always toward the planning and implementation of an RMS.

The following guidelines should be applied to determine the practical limits of resource planning in formulating RMS.

II. Human Considerations

These guidelines are designed as a checklist for planners to consider the human aspects in formulating and evaluating RMS.

A. Economics

1. Cost Effectiveness

There is a reasonable relationship between the cost of the system and the changes in resource conditions it brings about.

2. Financial Condition

There is an ability to acquire funds to install and maintain the system over time without destroying the financial viability of the operation.

3. Markets

There are adequate or sufficient management skills, land, materials, and equipment present or obtainable to operate and maintain the system.

4. Input Level

There are adequate or sufficient management skills, land, labor, material and equipment present or obtainable to operate and maintain the system.

5. Base Acreage

Base acreage for USDA programs is adequately maintained.

6. USDA Programs

The system would not preclude a normal degree of participation in USDA programs.

7. Sustaiinability

There is a reasonable expectation of long-term profitability for the operation as a whole.

B. Social Considerations

1. Public Health and Safety

Local community standards regarding public health and safety are followed.

2. Values

Social, family, and religious values, peer pressure, and civil rights and societal goals are considered.

3. Client Characteristics

Client characteristics, including age, planning horizon, special emphasis groups, and resources limited and otherwise are considered.

4. Risk Tolerance/Aversion

The degree of risk is reasonable compared to the alternatives.

5. Tenure

Tenure (owner or renter) or time available (e.g. part-time, absentee) does not affect the ability to install, manage or maintain the system.

C. Cultural Considerations

1. Absence of Presence

Absence of presence of cultural resources must be established. The definition of cultural resources is found in GM 420, Part 401.2.

2. Significance

Significance of cultural resources (i.e., presence of historic properties [GM 420, Part 401.2]) will be determined by qualified, cultural resources personnel (see Secretary of the Interior's Professional Qualifications Standards, Federal Register 48[190]:44738-44739) according to criteria of the National Register of Historic Places (36 CFR 60).

3. Neutral or Positive Effects

Following appropriate review, the system may be applied to an area containing a significant cultural resource (historic property) if it has a neutral or positive effect on that resource.

4. Negative Effects/Mitigation

Consulting parties, as defined in the NRCS National Cultural Resources Procedures Handbook (190 – 601.60 “Consultation”), may agree that a system with negative effects on the significant cultural resource (historic property) can still be applied if mitigation occurs to lessen those negative effects.