

| National and State Resource Concerns and Quality Criteria | | | | | |
|--|--|---|------------------------|---|---|
| WATER | | | | | |
| National Natural Resource Concern | Description of Concern | Quality Criteria | State Quality Criteria | Measurement Units | * Assessment Tools for Quality Criteria Evaluation |
| 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 | Local Soil Survey Information or Soils Investigation OR Documented visual assessment which may include assistance notes, documented client interview, Stream Visual Assessment Protocol (SVAP) , etc. OR 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 | Documented visual assessment and local soil survey information / investigation |
| Water Quantity - Reduced Storage of Water Bodies by Sediment Accumulation | Sediment deposits in water bodies (<i>i.e. ponds, lakes, wetlands</i>) 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 | RUSLE2 coupled with sediment delivery computations OR Volume calculations |
| 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 | Inches/Acre/Year - average annual inches of water used more efficiently per acre for the field or planning area/unit | Farm Irrigation Rating System (FIRS) as ammended for WV |

| National and State Resource Concerns and Quality Criteria | | | | | |
|--|--|---|--|-------------------|---|
| WATER | | | | | |
| National Natural Resource Concern | Description of Concern | Quality Criteria | State Quality Criteria | Measurement Units | * Assessment Tools for Quality Criteria Evaluation |
| 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. | <i>After confirmation of harmful levels of pesticides in groundwater through lab testing or water quality assessments</i> , pesticides are applied, stored, handled, disposed of, and managed so that groundwater uses are not adversely affected. | Non Measurable | Water quality laboratory test results OR Local water quality assessments by various federal, state or local government agencies |
| Water Quality - Excessive Nutrients and Organics in Groundwater | Pollution from natural or human induced nutrients such as N, P, and organics (including animal and other wastes) degrades groundwater quality. | Nutrients and organics are stored, handled, disposed of, and applied such that groundwater uses are not adversely affected. | Nutrients and organics are stored, handled, disposed of, and applied such that groundwater uses are not adversely affected. <i>Application of nutrients and organics are in accordance with a nutrient management plan prepared by a Certified Nutrient Management planner/consultant.</i> | Non Measurable | (590) Nutrient Management Standard Worksheets OR Local water quality assessments by various federal, state or local government agencies |
| 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 such that groundwater uses are not adversely affected. | Materials that harbor pathogens are stored, handled, disposed of, applied, and managed such that groundwater uses are not adversely affected. <i>For manure a CNMP is developed and implemented. Sludge land applications are applied according to State law(s).</i> | Non Measurable | Local water quality assessments by various federal, state or local government entities or agencies reported as harmful OR Records from water quality laboratory test results |

| National and State Resource Concerns and Quality Criteria | | | | | |
|--|--|---|--|-------------------|--|
| WATER | | | | | |
| National Natural Resource Concern | Description of Concern | Quality Criteria | State Quality Criteria | Measurement Units | * Assessment Tools for Quality Criteria Evaluation |
| 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, and managed such that surface water uses are not adversely affected. <i>All pesticides are applied according to label. If WIN-PST indicates a high risk, utilize the alternatives provided by WIN-PST.</i> | Non Measurable | WIN-PST (Windows Pesticide Screening Tool – USDA/NRCS) if available OR Local water quality assessments by various federal, state or local government agencies (e.g. appears on 303d list for dioxin) OR Water quality laboratory test results with surface water chemical sampling assay results |
| Water Quality - Excessive Nutrients and Organics in Surface Water | Pollution from natural or human induced nutrients such as N, P, and organics (Including animal and other wastes) degrades surface water quality. | Nutrients and organics are stored, handled, disposed of, and managed such that surface water uses are not adversely affected. | Nutrients and organics are stored, handled, disposed of, and managed such that surface water uses are not adversely affected. <i>Application of nutrients and organics are in accordance with a nutrient management plan prepared by a Certified Nutrient Management planner/consultant. Individuals receiving manures from other locations will follow 590 Nutrient Management and 634 Manure Transfer standards.</i> | Non Measurable | Phosphorus Index (590) Nutrient Management Standard and RUSLE2 OR Local water quality assessments by various federal, state or local government agencies (303d lists, etc.) OR Water quality laboratory test results OR Documented visual assessment (e.g. Stream Visual Assessment Protocol, photos, etc.) |

| National and State Resource Concerns and Quality Criteria | | | | | |
|--|---|---|--|--|---|
| WATER | | | | | |
| National Natural Resource Concern | Description of Concern | Quality Criteria | State Quality Criteria | Measurement Units | * Assessment Tools for Quality Criteria Evaluation |
| Water Quality – Excessive Suspended Sediment & Turbidity in Surface Water | Excessive concentrations of suspended sediment or organic particles degrades surface water quality. <i>Area has less than 70% vegetative cover and sediment delivery is positive in RUSLE2.</i> | The delivery or resuspensions and transport of fine sediment and organic particles are managed so that surface water uses are not adversely affected. | The delivery or resuspensions and transport of fine sediment and organic particles are managed so that surface water uses are not adversely affected. <i>Contributing area of accelerated and excessive sheet and rill erosion, gullyng, etc. are stabilized. Sediment delivery is reduced and area has 70% or greater permanent vegetative cover.</i> | Tons/Acre/Year – average annual tons of sediment/materials per acre kept from entering surface water for the field or planning area/unit | Local water quality assessments by various federal, state or local government agencies OR Locally approved inventory and documentation forms (e.g. LTP 300-4) and RUSLE2 coupled with sediment delivery OR Appears on the 303d list for sedimentation/siltation |
| 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 such that surface water uses are not adversely affected. | Materials containing heavy metals are stored, handled, disposed of, applied, and managed such that surface water uses are not adversely affected. | Non Measurable | Local water quality assessments by various federal, state or local government agencies OR Surface water body appears on the WVDEP 303d list for metals such as Hg ⁺ , Fe ⁻ , Al ⁺ , Cr ⁻ , Pb ⁻ , Mn ⁻ , Se ⁻ , Zn ⁻ , pH, etc. OR Water quality laboratory test results indicating harmful levels of a heavy metal |

| National and State Resource Concerns and Quality Criteria | | | | | |
|---|--|---|--|-------------------|--|
| WATER | | | | | |
| National Natural Resource Concern | Description of Concern | Quality Criteria | State Quality Criteria | Measurement Units | * Assessment Tools for Quality Criteria Evaluation |
| 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 such that surface water uses are not adversely affected. | Materials that harbor pathogens are stored, handled, disposed of, applied, and managed such that surface water uses are not adversely affected. <i>For manure a CNMP is developed and implemented. Sludge land applications are applied according to State law(s).</i> | Non Measurable | Local water quality assessments by various federal, state or local government agencies OR Water quality laboratory test results containing harmful levels of surface water pathogen sampling and assessment OR Appears on the 303d list for bacteria, fecal coliform, CNA-biological, etc. |

* Assessment tools shown are the principle tool(s) used in determining the presence or absence of this resource concern. **If a particular resource concern is selected, documentation of the use and/or application of the tool(s) is required.** Other tools may be available that provide additional data or supporting information.