

RESOURCE CONCERNS

Water

Quantity

- a. **Deficient amounts** – Soil moisture is insufficient to sustain vegetative growth.

Quality Criteria: Management provides optimum use of natural or applied moisture for the intended land use and is in balance with expected seasonally available moisture using the CPPE documentation.

- b. **Restricted capacity** – Loss of constructed conveyance system and storage capacity in ponds.

Quality Criteria: Storage and conveyance capacity is improved/restored and the contributing area is treated so it does not adversely contribute to the identified problem using the CPPE documentation.

Quality (Groundwater)

- a. **Ground water contamination (pesticides)** – Ground water pollution problems that occur as a result of inappropriate use of chemicals.

Quality Criteria: Storage, mixing and application of pesticides and cleanup of equipment are according to label instructions, and Pest Management Standard (595) in Section IV, FOTG.

- b. **Ground water contamination (nutrients and organics)** – Ground water pollution problems that result from the handling and use of natural or manufactured nutrients from animal and other waste.

Quality Criteria: Handling and storage of organic waste and fertilizers do not contribute contaminants at a level that adversely affects the ground water. Application of nutrients and organics are in accordance with Nutrient Management Standard and meet quality criteria level of treatment using the CPPE documentation.

- c. **Ground water contamination (pathogens)** – Known pathogen pollution of water.

Quality Criteria: Handling, storage and treatment of waste and the treated area are in accordance with waste storage structure standard and meet quality criteria level of treatment using the CPPE documentation.

- d. **Ground water contamination (heavy metals)** – Water pollution from organic waste containing metals or metal compounds, such as iron, zinc, cobalt, lead and copper.

Quality Criteria: Treated area does not contribute contaminants at a level that adversely affects the ground water, as specified in state regulations.

Quality (Surface water)

- a. **Surface water contamination (pesticides)** – Surface water pollution problems that result from use of chemicals.

Quality Criteria: Storage, mixing and application of pesticides and cleanup of equipment are according to label instructions, Pest Management Standard (595) in Section IV, FOTG and meet quality criteria level of treatment using the CPPE documentation. Fifty-foot buffers are maintained between water bodies, streams and areas where atrazine is applied.

- b. **Surface water contamination (nutrients and organics)** – Pollution problems that result from the handling and use of applied nutrients, especially nitrogen, phosphorus and organic matter.

Quality Criteria: Handling and storage of organic waste and fertilizers do not contribute contaminants that adversely affect surface water. Application of nutrients and organics are in accordance with Nutrient Management standard (590) in Section IV, FOTG and meet quality criteria level of treatment.

- c. **Surface water contamination (pathogens)** – Water is contaminated with bacteria, viruses, protozoans, helminths or fungi, from direct discharge or from runoff.

Quality Criteria: Collection, transfer, storage and treatment of waste and the treated area are in accordance with waste storage system standard, waste utilization or nutrient management standards and meet quality criteria level of treatment.

- d. **Surface water contamination** – Excess alkalinity or acidity, such as mine drainage.

Quality Criteria: Treated area does not contribute contaminants at a level that adversely affects the surface water for the concern activity based upon determination by WV-Department of Environment.

- e. **Surface water contamination from sediment and suspended solids** – Area has less than 70% vegetative cover and runoff enter a perennial flow stream.

Quality Criteria: Treated area has 70% or more vegetative cover and does not contribute contaminants at a level that adversely affects the surface water for the concern activity based upon meeting the quality criteria level of treatment.

- f. **Surface water contamination (heavy metals)** – Pollution from organic waste containing metals, such as iron, and aluminum and heavy metals – lead, zinc, copper, cadmium, mercury and cobalt or their compounds.

Quality Criteria: Application area does not exceed federal or state standards.

Condition

- a. **Surface water temperature** – Undesirable water temperature.

Quality Criteria: Temperature is acceptable for the intended use based upon stream temperature during critical summer months.

- b. **Surface water (dissolved oxygen)** – Low level of dissolved oxygen.

Quality Criteria: Dissolved oxygen is sufficient for the intended use based upon measured dissolved oxygen and quality criteria level of treatment.