

ADDRESSING WATER QUALITY NEEDS AND REGIONAL GOALS

Water Quality is an extremely important consideration to stakeholders in the Upper Flint region to meeting the vision and goals defined by the Water Council. The UFL Water Council has appointed a water quality committee to consider current and anticipated conditions and to identify recommendations for management practices that the Council should consider. Water quality modeling for this state water planning effort consists of two main paths; dissolved oxygen modeling using DOSAG to consider point source loadings to streams under critical low-flow, high temperature conditions, and watershed modeling to consider the combined effect of point and nonpoint sources, particularly for nutrients. In addition, the list of stream reaches designated as impaired and corresponding Total Maximum Daily Loads have been considered.

6.1. Identifying Water Management Practices

Existing plans and practices are already in place that address water quality in the region. These include:

- Point discharges to surface water bodies are permitted by the state
- Land application system discharges are permitted by the state
- Impaired stream reaches that have been identified based on water quality monitoring have been identified. Total Maximum Daily Loads for associated parameters have been developed and plans have been developed to address the sources of impairment.
- Erosion and sediment control practices are regulated by the state or local governments
- Stream buffers required by the state
- Air permitting required by the state (for point sources)
- Pollution prevention efforts required by the state (such as emission controls, requirements for unleaded fuels)
- Land use permitting required by the state (such as for mining, landfills, etc)
- Wetlands disturbance permitting required by USACOE

In addition, much work has been done in the state on developing best management practices for various industries. These include:

- Best Management Practices for Georgia Agriculture, Georgia Soil and Water Conservation Commission, 2007
- Georgia's Best Management Practices for Forestry, Georgia Forestry Commission, 2009
- Georgia Stormwater Management Manual
- Mining Association BMPs
- Nursery BMPs

Even with the work that has been done in the state and the region, there remain significant data and information needs to provide for future refinement of management practices. These include:

- Additional water quality data for water bodies in the region
- Additional information on the implementation of best management practices for industries in the region
- Coordination with other councils, particularly the Lower Flint-Ochlockonee, Middle Chattahoochee, and Metro North Georgia

While a majority of water quality trends and implications are generally well understood, there are substantial uncertainties in planning to meet water quality goals. Some of these uncertainties are regulatory in nature, and others are site specific in nature. Recognizing that the Water Development and Conservation Plan needs to move forward in spite of the uncertainty that exists, the Council has considered some of these uncertainties in the development of the plan, including:

- Future Florida nutrient standards and resulting requirements for Georgia permittees
- Potential regulatory changes, such as revisions to the state dissolved oxygen standard

The Council fully intends that adaptive management be employed in future revisions to the Upper Flint WDCP to ensure that the water quality needs in the region are balanced with other competing needs.

6.2. Selected Water Management Practices for the UFL Region

Description/final list of selected water management practices and their implications (14.7.c.ix). Management practices may include recommendations for future data collection efforts (14.7.c.xi).

6.2.1. Near-term Water Management Practices

6.2.2. Long-term Water Management Practices

6.2.3. Interregional Implications of Selected Management Practices

6.3. Fiscal Implications

Planning level costs of the selected water management practices as well as funding sources and options (14.7.c.xiv).