

SECTION 11: WATER QUALITY MANAGEMENT PRACTICES

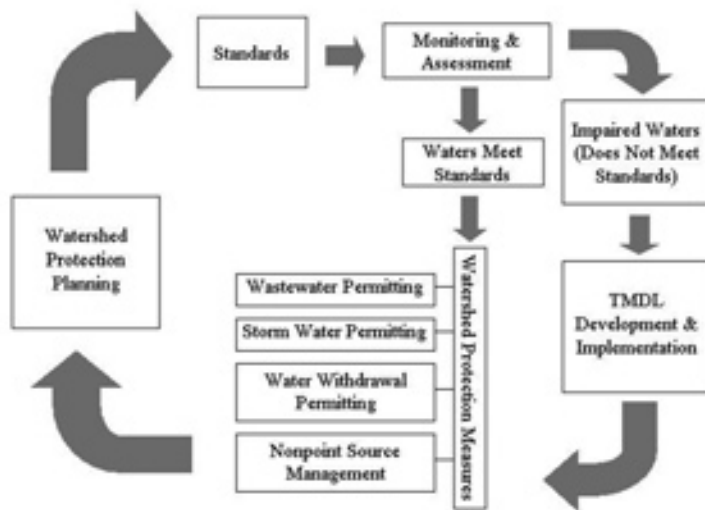
Background

While significant progress has been made in managing pollution from centralized wastewater treatment systems, Georgia's continuing growth will continue to be accompanied by conversion of land cover, more intensive land uses, and significant increases in the volume of pollutants discharged to waters from both point and non-point sources. If not managed properly, these increases will limit opportunities to beneficially use the state's resources.

In accordance with O.C.G.A. § 12-5-21(b), it is the responsibility of the Division to establish methods for preventing and controlling the pollution of the waters of the state. As demands on water resources increase, the state must increase its efforts to protect water from pollution emanating from wastewater discharges and urban and rural runoff. This effort, however, must be flexible enough to address the unique water quality issues in different parts of the state.

An array of management practices are available to support implementation of the integrated water policy in this plan and progress toward the goals of protection of clean water, restoration of impaired waters and management of assimilative capacity for current and future uses and users.

State and local government agencies, regulated entities and individual stakeholders currently implement a watershed approach to water quality protection. This cyclical approach is illustrated in the following figure.



The state designates uses for each water body, such as fishing and recreation. The state also sets criteria that must be met in order for the waters to be classified as supporting the designated use. There are criteria for parameters which indicate the health of the stream, such as pH and dissolved oxygen, and criteria for contaminants, such as pesticides, metals, and fecal coliform bacteria. These standards set goals for Georgia's waters.

Water quality monitoring is conducted to assess progress toward those goals. Currently, approximately 20% of the state's waters are tested. Waters found to be exceeding water quality standards are placed on Georgia's list of impaired waters and Total Maximum Daily Loads (TMDLs) are prepared for the listed waters. TMDLs are implemented through regulatory permitting

processes for point sources of pollution, and voluntary best management practices are used to address non-point sources of pollution.

Georgia's fourteen major river basins have been divided into five major groups and the monitoring, assessment, impaired waters listing, TMDL development, and implementation steps of the watershed approach are completed for each basin group over a five year period. This five year rotating river basin cycle provides an opportunity to coordinate work over an entire river basin. Each year different activities are ongoing in each of the five major basin groups.

Implementation of the watershed protection approach will continue in concert with this comprehensive water management plan. To build on these on-going practices, this plan also provides for enhancements in water quality management in two areas:

1. Practices to enhance water quality standards and monitoring, and
2. Practices to enhance the management of pollution including consistent implementation of and compliance with existing laws, TMDL implementation in tributaries to impaired waters, best management practices to address land use and non-point source pollution, coordinated planning and permitting, practices to manage on-site sewage treatment systems and new tools such as watershed permitting and water quality trading.

These practices, and the actions the EPD plans to take to encourage and implement these practices, are detailed below. In general, water quality management practices are most effective when implemented on a watershed basis. Again, flexibility is needed to address different water quality problems in different parts of the state. The regional planning process will allow flexibility in application of these management practices as well as innovation in response to new information and changing information. Other water quality management practices, beyond those described here, may be implemented as consistent with the regional water development and conservation plans ultimately adopted by the EPD.

Policy: Water Quality Management Practices

- (1) The purpose of water quality management practices is to manage point and non-point source pollution on a watershed basis in order to protect clean waters, restore impaired waters, and manage assimilative capacity for current and future users.
- (2) As of 2006, there were over 6,000 miles of streams on Georgia's list of impaired waters.
- (3) In accordance with O.C.G.A. § 12-5-21(b), it is the responsibility of the Division to establish reasonable methods for preventing and controlling the pollution of the waters of the state, after considering the technical means available for the reduction of pollution and the economic factors involved.
- (4) Water quality management practices are most effective when implemented on a watershed basis.

Implementation Actions

Implementation actions for specific management practices are described in sections 12 and 13.