

# **Watershed Management Area 2**

## **Scope of Work**

### **Priority Stream Segment**

#### **Background**

Watershed Management Area 2 (WMA 2) is located in the northwestern part of New Jersey. It spans primarily over Sussex and a small portion of Passaic County and contains fifteen municipalities. WMA 2 covers approximately 208 square miles and flows north into New York State draining to the Hudson River. The waterways of this region are trout maintenance streams as well as important recreational areas for the state. The region is also important for its wildlife and other natural resources. Its major watershed contains the Wallkill Wildlife Refuge. Nonpoint source pollution (NPS) and habitat degradation are primary problems affecting water quality. NPS and historical land use are responsible for the majority of water quality problems in this area. Few potential point sources of pollution exist in the region. Analysis of water quality problems, demonstrated through chemical and biological water monitoring, has established a link between water quality and habitat degradation.

Phosphorus, temperature, fecal coliform and arsenic are the major pollutants of concern in WMA 2. A TMDL may be required for some of these pollutants, even though the receiving waters are predominantly impacted by NPS pollution. In that case, the TMDL would consist mainly of a load allocation for the major categories of NPS pollution contributors along with an implementation plan for best management practices (BMPs) for stormwater management and NPS control, headwaters protection practices, or other mechanisms for addressing the priority issues of concern. Each TMDL, as an integral part of the specific WMA watershed management area plan (WMA Plan), will subsequently be proposed by the Department as an amendment to the appropriate Areawide Water Quality Management Plan (AQMP).

Currently, the characterization and assessment of WMA 2 has been completed as well as the open space mapping component of the Water Resources Assessment model. The PAC and TAC of WMA 2 are working with the Department to gather new and more detailed information to assist with the development of TMDL implementation plans.

#### **Project Description**

The primary objective of this project is the development of a subwatershed protection plan. To complete this task, an in-depth characterization of the current conditions will need to be undertaken as well as an evaluation and assessment of the findings, and an evaluation and assessment of the short-term and long-term management measures.

The selected site is the main stem of the Papakating Creek from Route 519/Kymer Road, following mainstem until confluence with Wallkill River. The segment runs through Wantage Township and Frankford Township in Sussex County.

Impairments:

Papakating Creek at Pelletown, 01367800  
Fecal Coliform

Papakating Creek at Sussex, 01367910, 01367909  
Phosphorus  
Fecal Coliform  
Arsenic

Papakating Creek near Sussex, 01367860  
Fecal Coliform

Papakating Creek near Wykertown, 01367780  
Fecal Coliform

## **TASKS**

### **Task 1:**

Review of Available Data for defined segment

- a. water quality and quantity records
- b. land use summary analysis from existing GIS
- c. TMDL issues

### **Task 2:**

Design and execution of limited water quality monitoring program to fill in data gaps needed to complete a characterization

- a. Chemical
- b. Biological
- c. Physical

### **Task 3:**

Development of Stream Segment Management Plan, including all available data, monitoring and modeling results. The overall components of the Stream Characterization Report will include:

- a. Measurable Goals
- b. Applicable BMPs
- c. Applicable Model Ordinance
- d. Mitigation Approaches used elsewhere, and their success.
- e. Timeline
- f. Identification Potential Funding sources

**Deliverables**

- Water quality and quantity records
- Land use summary analysis from existing GIS
- Summary of TMDL issues
- Design of water quality monitoring program
- Data from water quality monitoring program
- Stream Segment Management Plan

