

WMA 1 – Upper Delaware Watershed Scope of Work Subwatershed Protection Plan

Background

Watershed Management Area 1 (WMA 1) is located in the northwestern part of New Jersey. It includes all of Warren County and portions of Sussex, Hunterdon and Morris Counties, covering all or parts of 54 municipalities. WMA 1 contains approximately 746 square miles and its tributaries generally flow southwest to the Delaware River. The waterways of this region constitute an important recreational resource that includes miles of high quality trout production and trout maintenance streams. The region is also important for its wildlife and other natural resources. Within Area 1 there are 6 major drainage basins to the Delaware River: Flat Brook, Paulins Kill, Pequest River, Lopatcong and Pohatcong Creeks, and the Musconetcong River.

Through the end of December 2002 the Upper Delaware Watershed Management Project Team completed the following documents and methodologies:

- Settings Report
- Riparian Zones
- Wetlands
- Fish & Wildlife
- Water Quality
- Impervious Cover
- Recreational Resources
- Water Resource Evaluation System

These products, which focus on identifying, characterizing and assessing the resource features of WMA 1, are already in use by county government, local government and non-profits in their landuse decision making. Specifically, these tools are designed to inform master plan and zoning decisions and open space acquisition priorities. The reports each sought to identify and define priority watershed issues in relationship to natural resource data and environmental standards. The reports and methodologies confirm that nonpoint source pollution (NPS) and habitat degradation are the primary concerns in this region. NPS and historical land uses are responsible for the majority of water quality impairments.

Project Description

In order to begin the implementation of watershed management, focus will be placed on the development of a subwatershed protection plan. This plan will require gathering of additional segment specific information and formation of an action plan to deal with specific water quality and quantity issues. Collaboration with affected entities such as municipalities, counties, agricultural community, regional, state and federal agencies will be required to ensure the implementation measures will be carried out.

The selected site is on the lower Musconetcong River between 2 USGS/DEP combined monitoring network endpoints. The segment runs through Washington Township and

Franklin Township in Warren County and Bethlehem Township, Hampton Borough, and Lebanon Township in Hunterdon County. The watershed area captured is part of the larger fecal coliform TMDL segment identified by NJDEP as 1457000. This reach also has pH impairments that will have to be addressed by a TMDL in the future. The waters of the Musconetcong are mainly FW2-TM and the five large tributaries that enter the mainstem through agricultural fields in Franklin are classified as FW2-TP(C1).

In this segment 2 diverse environmental management problems will be captured. Hampton Borough has suspected failing septs as identified by the Upper Delaware Watershed Management Area Technical Advisory Committee members. The lower portion of this segment has a cluster of active dairy operations. One operation has begun to install manure-handling facilities and two other operations are at the beginning stages of implementing waste management systems and best management practices on their land.

With the willingness of the farmers to work with NRCS, this site is an ideal location to make measurable water quality improvements. There are also active environmental commissions in this area that have been regular participants with the Upper Delaware workgroup.

Upper Delaware Coordinators will work closely with NRCS to conduct targeted outreach to producers and growers in the selected subwatershed. Through an enhanced outreach program we will increase the number of farmers applying for EQIP and other cost share programs to implement best management programs. Extra emphasis will be placed on farms that have not historically participated in conservation programs.

Tasks

- Task 1: Review of available data for defined segment
 - TMDL data gathered
 - Land use summary analysis from existing GIS
 - Upper Delaware Reports
 - Municipal & County NRIs and other local data as available
 - Other information as needed
- Task 2: Design and execution of limited water quality monitoring program to fill in data gaps needed to complete a characterization
 - Chemical
 - Biological
 - Physical
- Task 3: Development of Subwatershed Protection Plan
 - Measurable Goals
 - Applicable Recommended BMPs
 - Applicable Model Ordinances
 - Timeline
 - Identification of Potential Funding Sources
 - Outreach Plan

Deliverables

Task	Deliverable	Timeline
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<p>Task 1: Review of available data for defined segment</p>	<p>Report assessing the existing data. Sources searched will include, but are not limited to, Upper Delaware Reports, Municipal and County NRIs and other available information, Americorp data sheets, NJPDES discharge records, NJDEP known contaminated sites, NJDEP GIS data</p>	<p>1st quarter</p>
<p>Task 2: Design and execution of limited water quality monitoring program to fill in data gaps needed to complete a characterization</p>	<p>Monitoring report, including raw data available electronically, Fecal coliform sampling</p>	<p>2nd & 3rd quarter</p>
<p>Task 3: Development of Subwatershed Protection Plan</p>	<p>Subwatershed Protection Plan</p>	<p>3rd & 4th Quarters</p>