Delaware Bay Whole Basin Program

Preliminary Assessment Revisited

Summary prepared by the Watershed Assessment and Management Section
February, 2014

Background and Overview

Between 1997 and 2005, the Delaware Department of Natural Resources and Environmental Control published preliminary assessment reports for each of Delaware's four major drainage basins: the Piedmont, Chesapeake, Delaware Estuary, and Inland Bays. Each of these assessment reports contained recommendations for steps that should be taken to improve Delaware's environment and recreational resources and gather critical data and information. This "Whole Basin" approach used drainage basins as the chief management unit and sought to bring together the expertise of all DNREC Divisions to create a comprehensive and coordinated management effort. In 2013, Division of Watershed Stewardship staff met to evaluate progress towards implementing recommendations that had been laid out in the Whole Basin Preliminary Assessment Reports. The main objective of this task was to determine the status of the recommendations and highlight areas for further progress or evaluation. To accomplish this objective, staff evaluated each recommendation and determined the percentage of recommendations that had been addressed in each of the four reports. The Delaware Bay Basin Preliminary Assessment Report was analyzed by category (Figure 1). A more in-depth assessment of recommendations can be found in Figure 2.

Category	Score
Contaminants	100%
Geology, Soils, Sediments	100%
Land Use	55%
Living Resources	91%
Recreation	66%
Water Resources	83%
Wetlands	70%

Figure 1. Percentage of recommendations addressed by category from the Delaware Bay Whole Basin Preliminary Assessment Report.

Methodology

Each recommendation was given a status of "complete," "ongoing," "partially addressed," or "not addressed" based on research and correspondence with Department staff. Recommendations were then grouped into categories from the Delaware Bay Preliminary Assessment Report: Contaminants; Geology, Soils, Sediments; Water Resources; Wetlands; Living Resources; Recreation; and Land Use. A score was determined for each category by dividing the number of completed and ongoing recommendations by the total number of recommendations. Scores above 75% received a "thumbs up" scoring, scores between 50% and 75% were scored as "thumbs sideways—neutral," and scores below 50% received a "thumbs down" score.

Category	Implemented/Ongoing	Not Implemented
Contaminants	• The State has worked with local emergency planning committees to map the facilities in their districts and periodically update their information. • Investigation of salt pile protection during storage and transfer accomplished by DelDOT.	All recommendations from this section were addressed.
Geology, Soils, Sediments	• Soil metric information is available through the Web Soil Survey map and can be accessed online. • Preliminary Land Use Service Review incorporates GIS layers for sensitive species, recharge areas, and other parameters to gauge environmental impact of projects.	All recommendations from this section were addressed.
Land Use	• Municipalities are required to update comprehensive plans every five years and zoning maps are required by the Delaware Office of State Planning Coordination. • Land Protection Act revised to create a matching grant program within the Open Space Program.	• Revise the scoring system of the Agricultural Lands Preservation Act to give increased weight to wetlands, forests, areas in close proximity to open space, wind-breaks, buffer strips, and other natural amenities on agricultural lands.
Living Resources	• Delaware Department of Agriculture has conducted landowner outreach, workshops, and surveys to educate private forest owners regarding wildlife habitat and biodiversity maintenance. • Invasive species removal teams working on public lands and education, outreach, and cost-share to	• Implement requirements for buffer zones along streams to protect prehistoric and early historic period archaeological sites.
Recreation	• The Route 9 Coastal Heritage Scenic Byway was designated a state scenic byway in 2006. • Division of Fish and Wildlife has received a 1 million dollar grant from the Federal Highway Administration and DelDOT to enhance wildlife viewing, interpretation, and public amenities at three locations.	• Increase Sussex County recreational program infrastructure.
Water Resources	• More water sampling sites have been added to the lower DE estuary. • The State continues to play a major role in cleaning up PCBs and other toxics in the estuary.	• Use Clean Water Act Sections 313 and 316 to review and to update waste-water infrastructure for cooling water.
Wetlands	• A wetland characterization method has been used to determine wetland functioning, by watershed. • 5 to 10 year mapping intervals are used to develop baseline wetland losses.	• Adopt statewide wetland mitigation policy that includes the concept of "land banking."

Figure 2. Examples of recommendations from the Delaware Bay Whole Basin Preliminary Assessment Report.

Moving Forward

Overall, 81% of the recommendations in the Delaware Bay Preliminary Assessment Report have been or are being implemented. Additional progress could be achieved by investigating why certain recommendations were not implemented and determining if future action is warranted.