

AGENDA NOTE - HRPDC EXECUTIVE COMMITTEE MEETING

ITEM #6: REGIONAL BACTERIA SOURCE TRACKING STUDY

SUBJECT:

The HRPDC, HRSD and several of the region's localities, working through the HRPDC Directors of Utilities and Regional Stormwater Management Committees, are conducting scientific studies to support development of a bacterial identification methodology for the Hampton Roads region.

BACKGROUND:

A number of Hampton Roads waterways have been classified as impaired due to the presence of levels of fecal bacteria that exceed water quality standards for shellfishing and recreation. Total Maximum Daily Load (TMDL) studies and implementation plans must be prepared for these waterways. However, bacteria data contained in these studies is typically not specific enough to allow targeting of sources for bacteria reduction and management.

The Hampton Roads Planning District Commission staff has been leading a regional effort to develop a bacterial identification methodology for the Hampton Roads region. Proven genetic techniques will be used to differentiate bacteria sources at the species level so that TMDL plans can be designed and targeted to address the cause of the bacterial impairment. University researchers from Virginia Tech, University of South Florida, and University of North Carolina are conducting the study, which the Hampton Roads Sanitation District and the following localities are funding: James City County, Norfolk, Virginia Beach, Portsmouth, Suffolk, Williamsburg and York County.

Three watersheds were selected as case study locations to test the usefulness of various methodologies in the Hampton Roads area. HRPDC staff has coordinated with the study team and locality staff to conduct reconnaissance sampling in Shingle Creek, Suffolk; Moores Creek, York County; and Mill Dam Creek, Virginia Beach. Stations have been selected for monitoring in Shingle Creek and Moores Creek, and locality staff has begun collecting samples for analysis of indicator bacteria by HRSD.

Ms. Jennifer L. Tribo, Physical and Environmental Planner, will brief the Commission on this initiative.

RECOMMENDED ACTION:

This briefing is being provided for information purposes at this time. The HRPDC will be bringing several TMDL Implementation Plans to the Commission for consideration in the coming months. Results of the bacteria source tracking study will be brought to the Commission for consideration in the future.