

# Fact Sheet on the U.S. Virgin Islands' 2016 Impaired Waters List

## February 2017

The EPA has approved the U.S. Virgin Islands' 2016 list of impaired waters requiring a total maximum daily load (TMDL). The U.S. Virgin Islands' 2016 list presents information on impaired waters, pollutants causing impairment and pollutant sources. The list is important because it focuses management attention on impaired waters. The EPA will continue to build partnerships throughout the U.S. Virgin Islands to ensure that impaired waters receive proper attention.

### How States Report on the Quality of their Waters

The Clean Water Act requires states (Section 502 of the Act defines "state" to include the U.S. Virgin Islands) to assess the quality of their water bodies and to report their findings every two years to the EPA. States adopt specific water quality standards, which serve as the foundation for water quality management. Water quality standards identify the designated uses for each body of water (such as swimming, drinking, shellfish harvesting, etc.) and set scientific criteria to protect those uses. During the assessment process, states compare the collected data to the established water quality standards.

In addition to reporting on the overall quality of all waters, the Clean Water Act directs states to identify and list specific water bodies where water quality is impaired or threatened by pollutants. This requirement is found under section 303(d) of the Clean Water Act and the list of impaired waters is often referred to as the "303(d) list."

- Impaired – A body of water that does not meet water quality standards even after pollution controls have been put in place.
- Threatened – A body of water that is expected to be impaired within two years.

Each impairment reflected on the 303(d) list requires a calculation of the maximum amount of the impairing pollutant that a water body can receive and still meet water quality standards. This calculation is called the TMDL. TMDLs include reductions for pollution sources impacting the water body which, when achieved, will result in the attainment of water quality standards in the water body.

In certain cases, impaired or threatened waters may not appear on a state's 303(d) list. If a TMDL has already been developed for the water, another required control measure is expected to result in the attainment of water quality standards within a reasonable amount of time, or the impairment or threat is the result of *pollution not caused by a pollutant*<sup>1</sup>, then the water may not be included.

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<sup>1</sup> Examples of pollution not caused by a pollutant include segments impaired solely due to lack of adequate flow or stream channelization.

Water quality monitoring data and other information must be considered by states in assessment and reporting efforts. Monitoring is carried out by national, state, local and tribal authorities, universities, dischargers, volunteers and others, and can include measurements of physical and chemical parameters (temperature, dissolved oxygen, suspended sediment, nutrients, metals, oils, and/or pesticides, for example), examinations of streamflow, water color, condition of stream banks and lake shores, observations of communities of aquatic wildlife; and sampling of fish tissue or sediment. Land use data, predictive models and land surveys may also be used.

### **Summary of 2016 Findings**

The U.S. Virgin Islands' 303(d) list includes 206 instances where a pollutant is causing a designated use impairment.

- The most common pollutants causing impairment include:
  - turbidity (33.5% of impairments)
  - dissolved oxygen (17.48%)
  - pathogens (24.27%)
  - pH (8.25%)
  
- Forty (40) new waterbody/pollutant combinations were added to the 2016 303(d) list. The new combinations are summarized below:
  - 10 assessment units impaired for dissolved oxygen;
  - 10 assessment units impaired for turbidity;
  - 6 assessment units impaired for fecal coliform;
  - 5 assessment units impaired for enterococci;
  - 5 assessment units impaired for phosphorus;
  - 4 assessment units impaired for pH.

The Integrated Report list also specifies those water bodies that no longer require listing on the 303(d) list. Removal of a water body from the 303(d) list, called delisting, may indicate that the water is restored, a TMDL has been developed, the water is receiving management attention that is expected to result in the attainment of water quality standards, or other factors (including errors).

In the 2016 cycle, 27 waterbody/pollutant combinations were removed from the 303(d) list due to attainment of applicable water quality standards. Newly available water quality monitoring data was integral in confirming the attainment of water quality standards for these 27 waterbody/pollutant combinations.

### **Evaluation of Management Efforts**

EPA's National Water Program has prioritized protecting and restoring America's watersheds, and the 303(d) list is a useful tool for measuring progress in this effort. By comparing recent 303(d) lists to those developed in past years, managers can gain a sense of whether – and how quickly – impaired waters are being restored. EPA uses states' 2002 303(d) lists as a baseline

against which managers track impairment removal and water quality improvement. Examination of the U.S. Virgin Islands's recent 303(d) lists reveals that, over the last 12 years, 3 formerly impaired waters now meet applicable water quality standards. In addition, many other waters, while not fully restored, are improving in quality. Water quality improvement in restored waters can often be traced to watershed management efforts undertaken by EPA, states and local stakeholders.

### **The Water Quality Sampling and Reporting Process**

There are 164 near-shore sampling sites around the U.S. Virgin Islands: 68 stations around St. Croix, 69 stations around St. Thomas, and 27 around St. John. These stations are currently being monitored quarterly by an EPA contractor. The quarters included in analysis for this cycle were: four quarters for fiscal year 2015, three quarters for fiscal year 2014, and one quarter for fiscal year 2013. During this reporting cycle, the first quarter in fiscal year 2014 was not sampled, so the final quarter in fiscal year 2013 was included for assessment purposes.

The U.S. Virgin Island Beach Program conducts monitoring in accordance with a tiered sampling plan established in 2014. Thirty-three (33) tier 1 beaches are monitored on a weekly basis. Five (5) tier 2 beaches are monitored weekly on a seasonal basis. Six (6) tier 3 beaches are 3 monitored when the program deems it necessary (i.e., after storm events; if there are special events planned for that area; or if there is a suspected contamination event).

The Beach Program has recognized that there are several local seasons that have a generally higher concentration of recreational beach users than others. These seasons include the camping season (April and May) and the winter season (October to December) when there are a significant number of mainland visitors using the resources at the Territorial resorts and timeshares. Tier 2 beaches will not be sampled during January-March or in the month of September. All Tier 1 and Tier 2 beaches will be monitored weekly during the summer season (June to August).

In addition, for the 2016 303(d) listing cycle, DPNR sent letters soliciting water quality monitoring data to a wide variety of organizations, including academic institutions, government agencies and nongovernmental organizations. Once received, DPNR assembles all existing and readily available data and evaluates this data against the U.S. Virgin Islands' water quality standards, using methods described in the U.S. Virgin Islands' Consolidated Assessment and Listing Methodology. These assessments inform the U.S. Virgin Islands' 303(d)/305(b) Integrated Report.

### **How to Get Involved**

Recognizing that stakeholders throughout the U.S. Virgin Islands collect valuable water quality data, DPNR has established a process that allows groups and individuals to submit information for use in the Territory's assessment work.

To submit data for consideration during future 303(d) assessment cycles, submissions (data, photographs, etc.) must be sent to DPNR. When the data is submitted as part of the 303(d) or

305(b) process, stakeholder information is considered. Parties submitting information should send materials to:

Department of Planning and Natural Resources  
Division of Environmental Protection  
45 Mars Hill Frederiksted, St. Croix, USVI 00841  
Fax: (340) 773-9310

Alternatively, information can be sent via email to: [ep\\_dpnr@dpnr.vi.gov](mailto:ep_dpnr@dpnr.vi.gov). If you have questions or would like to speak directly with a DPNR representative, call 340-773-1082.

DPNR also provides the opportunity for formal public comment on its draft 303(d) list. This is typically announced in early January of even-numbered years via the DPNR website and other news outlets and comments are accepted during a 30-day period.

### **EPA Contacts for the U.S. Virgin Islands 303(d) List**

If you have questions or concerns, contact EPA's U.S. Virgin Islands water quality assessment and 303(d) list expert, Mr. Nathaniel Delano, at (212) 637-3884 or email [Delano.Nathaniel@epa.gov](mailto:Delano.Nathaniel@epa.gov).