## Description of the Process for Prioritizing Impaired Waters



The purpose of both Virginia's State Water Control Law (§ 62.1-44.2) and the federal Clean Water Act (§ 101(a)(2)) was to maintain or restore the quality of state waters such that they are fishable, swimmable, and protective of healthy aquatic ecosystems. When assessing water quality, DEQ determines whether or not different uses of state waters are impaired based on water quality standards. These uses of state waters are based on the purpose of the State Water Control Law and the Clean Water Act. DEQ considered the different uses of state waters when prioritizing waters impaired for the fish consumption use, the shellfishing use, the recreational use, and the aquatic life use. Accordingly, DEQ applied a method for prioritizing impaired waters based on criteria associated with the use that is impaired, regional priorities, and practical considerations.

As an initial step, all waters impaired for shellfishing, recreational, and aquatic life uses were prioritized by their proximity to potable water supply intakes that are under the regulations administered by the <u>Virginia Department of Health (VDH)</u>.

To prioritize waters impaired for the fish consumption use, DEQ looked at PCB (polychlorinated biphenyls) fish consumption impairments and prioritized impairments based on current monitoring data and the known severity of the impairments.

The prioritization of waters impaired for the shellfishing use was considered in tandem with the prioritization of waters impaired for the recreational use since both are based on bacteria water quality standards. For these impairments caused by excessive amounts of bacteria, DEQ conducted a statewide analysis of bacteria impairments that coincide with Department of Game and Inland Fisheries (DGIF) boat landings and/or Department of Conservation and Recreation (DCR) existing and proposed Blueways and Water Trails. In other words, areas where bacteria impairments exist and recreational activities are expected to be concentrated were prioritized for TMDL or TMDL alternative development.

For the prioritization of waters with an impaired aquatic life use, DEQ looked at waters that were impaired by 1) low dissolved oxygen concentrations, 2) high or low pH levels, 3) high temperatures in coldwater streams, and 4) impairments to the benthic macroinvertebrate communities. Since these impairments result in an unhealthy aquatic ecosystem, DEQ sought to prioritize waters impaired for the aquatic life use where additional benefits to aquatic ecosystems could be gained. In order to maximize these additional benefits DEQ conducted a statewide analysis of small watersheds (specifically 6th order Hydrologic Units) that contained waters impaired for one or more of the 4 reasons listed above in addition to waters that contained one or more of the following criteria:

- 1. The presence of a state and/or federally listed threatened or endangered species (<u>spatial data provided by DGIF</u>)
- 2. The presence of a DCR Stream Conservation Unit, which is based on:
  - The presence of a rare, threatened, or endangered species; or
  - The presence of an aquatic ecological community of high integrity

Since all TMDLs are designed to protect the watershed for which they are developed, the idea was that in developing a plan to restore waters impaired for the aquatic life use, other state and federal goals of protecting rare, threatened, or endangered species and ecological communities of high integrity could also be implemented.

All of the impaired waters prioritized by the methods described above were packaged into datasets for final prioritization. This final set of priorities was determined both by the number of times an individual impaired water was prioritized by the criteria explained above, and by practical considerations such as the severity of the impairment, the age of the impaired status, existing monitoring plans, watershed characteristics, and stakeholder participation. Following this step, the impaired waters prioritized for TMDL, TMDL alternative, stressor analysis, or natural conditions report development during 2016-2022 were assembled into a list and public noticed for public comment on July 27<sup>h</sup>, 2015. Only one comment was received and addressed by DEQ. It did not result in any changes to the priorities list that was then finalized following the close of the 30-day public comment period and submitted to EPA. After a few months of implementing the priorities list, EPA announced that States could revise their priorities lists and include TMDL revisions in the list. Accordingly, in the winter of 2016 DEQ revised the list of prioritized impaired waters and public noticed it for public comment on April 4<sup>th</sup>, 2016. The comment period ended on May 4<sup>th</sup>, 2016 with no comments received.