

RATIONALE FOR TABLING THE PROPOSED BOAT PUMP-OUT BMP

In 2024, the Chesapeake Bay Program Water Quality Goal Implementation Team's Wastewater Treatment Workgroup (WWTWG) was charged with assessing the 2018 Expert Panel Report on the Boat Pump Out BMP to determine whether to adopt the proposed nutrient load estimation methodology in the Phase 7 Chesapeake Bay Watershed Model. A small group of WWTWG members formed to critique the methodology documented in the report and decide whether to recommend the WWTWG pursue its adoption. After reviewing the report and sharing individual assessments, the small group members communicated with contributors to the 2018 expert panel report and various representatives of jurisdictions or organizations that previously expressed interest in developing the Boat Pump Out BMP. The small group ultimately recommended that the WWTWG table the Boat Pump Out BMP after identifying concerns about the assumptions required to develop data inputs used in the proposed load estimation methodology. Jurisdictional stakeholders supported that recommendation, noting the low potential to generate nutrient reduction credits through boat pump-outs since those loads are already accounted for at wastewater treatment plants where pump-out waste is received.

WWTWG MEMBER COMMENTS

Group members representing Maryland and Virginia provided comments documenting specific concerns with the methodology proposed in the 2018 Expert Panel Report on the Boat Pump Out BMP. The document compiling those concerns was distributed to WWTWG members for review and summarized for discussion at multiple WWTWG meetings between July 2024 and July 2025. No objections were heard from WWTWG members or interested parties attending meetings, suggesting consensus among all jurisdictions to table the Boat Pump Out BMP. WWTWG members highlighted the following concerns with the proposed Boat Pump Out BMP:

- It is voluntary to report the amount of pump-out usage at a marina, and there is no readily available dataset for tracking waste removed using boat pump-outs.

- In Maryland, tracking could be accomplished only through the Department of Natural Resources grant program.
- Virginia did not adopt the tracking methodology proposed by the City of Virginia Beach, included in the Expert Panel Report.
- Other jurisdictions did not identify mechanisms for tracking pump-outs.
- Waste loads removed from the Bay via boat pump-out are already accounted for in the watershed model through reported loads from the receiving wastewater treatment plant (WWTP).
- Stated assumptions about boat usage and nutrient loads associated with specific boat classes must be validated to avoid introducing inaccurate load estimations into the watershed model.
- Whether the method should be applied in the areas of the watershed not designated as a no-discharge zone (NDZ) was unclear, and only a small number of NDZs have been designated by Maryland and Virginia.
- The proportion of the overall Bay nutrient load represented by boat pump-outs is minimal relative to the extensive effort necessary to develop sound accounting and reporting methods that accurately quantify pump-out usage, boat usage, and boat waste load inputs.

FUTURE CONSIDERATIONS

WWTWG members acknowledge the potential benefits of accurately accounting for all measurable nutrient loads in future iterations of the Bay watershed model. Workgroup members encourage iteratively revisiting the Boat Pump Out BMP to assess whether the accounting methodology proposed by the 2018 Expert Panel Report could be improved to accurately account for boater nutrient loads in a future version of the watershed model. Should reliable tracking data on boat waste loads, boat usage, or pump-out usage become available among most Bay jurisdictions, the WWTWG should reevaluate whether there is an opportunity to accurately model boater nutrient loads and incentivize the reduction of those loads through crediting systems for boater pump-out usage.