

From: The Recreational Boating Association of Washington

To: Peter Murchie, Manager

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Re: Invitation to Provide Data and Information Relevant to EPA's Consideration of Remanded Issues, *American Waterway Operators v. EPA et al.*, 18-cv-02933 (APM) (D.D.C.)

The following are comments relevant to the Puget Sound NDZ impact on recreational boating

Introductory context qualifiers:

- 1) The commercial industry is not the only sector impacted by the recent Puget Sound-wide NDZ designation, nationally unprecedented in its geographic scope. The economic effect on the recreational sector, while considerably smaller than on the commercial sector, is nevertheless significant to those vessels and owners directly affected, both financially and operationally.
- 2) The recreational sector fully supports water quality control as evidenced by the millions of gallons of raw sewage obediently pumped out of recreational vessels annually via shore based and mobile *waterborne* pump-out services pre-NDZ. Recreational boaters support all efforts to ensure that raw sewage is either pumped out or kept in holding tanks and, as detailed further below, would support a prohibition on raw sewage discharges directly into Puget Sound.
- 3) The recreational sector stakeholder groups support the state's Clean Vessel Act pump-out program and advocates for additional pump-out service locations, especially mobile service in high usage areas.
- 4) During multiple marine stakeholder meetings convened by Washington State Department of Ecology [DOE] leading up to their declaration of need, it was agreed by all that a suitable analysis of sewage discharge effects could be modeled mathematically using known proven dilution/dispersion models mimicking Puget Sound responses (not unlike finite-element analyses). In all but one of the many "runs" of this model, the effects of typical treated marine sewage discharges (the only type controlled by an NDZ) NEVER exceeded state-mandated water-quality (especially regarding fecal coliform concentrations) at beaches and shellfish beds, basically due to significant dilution. The only "run" exceeding mandated quality, was later shown to have used an erroneous input as if the entire first square-mile cell of the model were FILLED with sewage (raw, not treated at that), a condition that only could have been met if a ship with the entire population of China, USA, and Germany aboard were to suddenly discharge.
- 5) However, DOE continued to press for "declaration of need" anyway, citing that the Federal Clean Water Act did not require any petitioner to scientifically justify their "declaration of

need.” As a result, important modeling provided by an affected stakeholder group did not get as much attention as we believe it deserved.

- 6) The Recreational Boating Association of Washington [RBAW], representing the recreational vessel community, disagreed with the need for a Puget Sound-wide NDZ designation because the Association did not believe the demonstrated science for such a designation was properly put forth.
- 7) Instead, RBAW joined with a coalition (the Marine Alliance) that recommended treated-discharge restrictions in sensitive targeted areas (“targeted NDZ zones”), as well as the continued use of federally approved Type I and II treatment systems in the main stem of Puget Sound.
- 8) RBAW and others in the Marine Alliance did not agree that such geographically-limited areas are un-manageable or un-enforceable, as the saltwater-sportfishing regulations enforced by Washington’s Department of Fish & Wildlife vary according to thirteen (13) separate well-defined small segments, nine (9) of which divide up the Puget Sound basin.
- 9) Pump-out capability for recreational vessels is seemingly adequate based on the number of installed locations relative to the number of registered vessels. However, due to maintenance issues, tidal contingent issues, seasonal and limited operating hours, the advertised stations are not always available. A recent boater survey conducted by the state Department of Ecology indicated only 22 percent of responding boaters (large sample: 4195 respondents) consider current pump-out capability adequate.
- 10) The trade-off of a treated discharge versus a holding tank (untreated) discharge forced by less than 100 percent pump-out availability could plausibly result in a small *increase* in untreated discharges with implementation of an NDZ covering the entirety of Puget Sound.
- 11) Based on the relatively small number of recreational vessels with installed treatment systems (rendered illegal to use by the current NDZ designation and requiring retro-fit), post-NDZ sewage pump-out volume cannot be reasonably expected to measurably increase.

Note: The impacts on recreational boating being presented are more qualitative than quantitative but additional supporting data may be developed if critical to fully substantiate the case.

Specific Puget Sound-wide NDZ impact on recreational boating:

- 1) Local vessels – typically under 65’
  - a) With the federal three-mile limit for untreated discharge already encompassing all (except for a few small pockets in main-channel approaches) of Puget Sound, the Puget Sound-wide NDZ designation directly impacts only those vessels and owners who have incurred the cost of installation of a federally approved Type I or Type II onboard treatment system. These systems are rendered illegal post-NDZ for Puget Sound boaters’ use in their entire home waters. Retro-fit of each of these vessels with holding tanks can reasonably be expected to be in the thousands of dollars. Rough estimates of the actual number of these vessels are placed at as many as several hundred.

b) Although the mathematical modeling referenced above used the federally-mandated minimum performance of Type I treatment units (1000 fecal coliform units/100ml), the majority of Type I units remaining in Puget Sound vessels are the various Raritan units ("Lectra-San", "Electro-Scan" and successors) which self-generate chlorination electrically from salt (added or in-the-water), and have been proven by independent testing to provide far better effluent quality than the federally-mandated minimum: EPA's own January 2010 test [EPA/600/R-10/008] concluded 83 fcu/100ml on average, but if two erroneous samples in this test (where the unit clearly was asking for "more salt") are thrown out, actual verified performance is 2.43 fcu / 100ml --- note that this effluent AT THE VESSEL DISCHARGE POINT, absent any dispersion or dilution, is over six times better than Washington State's desired water quality over shellfish beds or at swimming beaches - of 14 fcu / 100ml. A New Zealand government test also noted that this Raritan's technology also significantly reduced virus load during the treatment, which not even land-based municipal treatment plants can claim.

2) Local vessels greater than 65'

The majority in this vessel size are likely to have Type II treatment systems installed, which additionally reduce nitrogen-loading (BOD). Rendering these systems illegal and forcing them to shore based pump-out stations will incur the same limitations of dock space and draft requirements being experienced by the commercial vessels. There is no reliable current estimate of the number of these vessels.

3) Transient vessels (mega-yachts, charters, out of state/out of country cruisers and visitors)

- a) The state has expended considerable effort towards the expansion of visiting vessel participation, thereby supporting tourism, provisioning and boatyard business.
- b) Providing no viable alternative discharge options for vessels with treatment systems, and unlikely to retro-fit with Type III holding tanks, will essentially kill those economic initiatives. Economic estimates of the projected loss due to the Puget Sound-wide NDZ designation (some based on similar initiatives in Florida) used to support an enacted tourism Bill in the state legislature are unavailable to this presentation but were considered significant during passage of the Vessel-tourism bills.

Summary:

- 1) RBAW, acting in its role to represent the recreational sector, is supportive of the AWO position and as well remains supportive of NDZ designation of targeted specific sensitive areas, along with continued allowance of treated discharge in all other main-channel Puget Sound waters with onboard systems that meet federal standards. RBAW furthermore endorses and promotes prohibition of untreated discharge in all of Puget Sound.
- 2) The comparatively small volume of treated discharge from the limited community of recreational vessels outfitted with federally-approved Type I or Type II units is reasonably and scientifically negligible and does not warrant the impact of Puget Sound-wide NDZ

designation. The Puget Sound-wide NDZ designation may in fact be a net negative rather than positive effect on overall water quality control.

- 3) Additional efforts to expand, upgrade, and maintain fixed pump-out stations, an increase in mobile pump-out service, along with education on their use and advertised availability is considered more productive in improving Puget Sound water quality than outlawing the small segment of vessels using federally approved treatment systems.
- 4) While these comments are representative but not all inclusive of the impact of the Puget Sound-wide NDZ designation, it is hoped that they illustrate both a challenge to the basis for the current designation as well as a recreational boating community support for the principles of achieving an actual and measurable improvement in overall water quality.

Respectfully submitted for your consideration

Recreational Boating Association of Washington