

# Washington State Department of Ecology No Discharge Zone Advisory Group Meeting #1

June 20, 2013

Center for Urban Waters, Tacoma

## Advisory Group Attendees

Cyrilla Cook, WA Department of Natural Resources Aquatics

Duane Fagergren, Puget Sound Partnership

Dave Steele, Pacific Coast Shellfish Growers Association

Aaron Barnett, Washington Sea Grant

Bob Ranzenbach, Recreational Boaters Association of Washington

Alan Wolslegel, WA State Parks

Gail Luhn, Shilshole Liveaboard/WA Liveaboard Association

Katelyn Kinn, Puget Soundkeeper Alliance

Jim Flies, Harley Marine

Andrew Kolosseus, WA Department of Ecology

Joseph Gellings, Port of Seattle

Mark Henley, Department of Ecology

Kevin Fitzpatrick, Department of Ecology

Charlie Costanzo, American Waterways Operators Association

David Fyfe, NW Indian Fisheries Commission

Mike Moore, Pacific Merchant Shipping Association

Mary Knackstedt, WA Department of Health

Peter Schrappen, NW Marine Trade Association

Mark Toy, WA Department of Health

Heather Trim, Sierra Club

## Meeting Leads

Amy Jankowiak, Department of Ecology

Joy Michaud, Herrera Environmental Consultants, Inc.

Sarah Brace, Veda Environmental

Nanda Guajardo, Veda Environmental

## Meeting Summary

At this first of two No Discharge Zone (NDZ) Advisory Group meetings, the Department of Ecology (Ecology) and Herrera Environmental Consultants Inc. (Herrera) presented background information and an overview of the process for petitioning to the U.S. Environmental Protection Agency (EPA) to establish a NDZ in all or part of Puget Sound. Veda provided an overview of the role and expectations of the Advisory Group: to provide insight, guidance and additional information to help guide Ecology to a decision on whether or not to move forward on the petition. Ecology then described the petition

process and progress to-date on evaluation and stakeholder outreach activities and information on water quality concerns and marine sanitation devices. Next, Herrera presented their research findings regarding the estimated population and sewage management practices of recreational and commercial vessels and current pumpout capacity in Puget Sound. Throughout the meeting, the Advisory Group members gave input and asked questions. The substance of the Q/A, conversations and comments shared during the meeting summarized below by topic or issue.

## Questions & Discussion

### General NDZ information:

*Generally, what is the size and extent of NDZs elsewhere?* The size of NDZs ranges from small bays to entire State coastlines; for example, most of the northeast coast is designated as a NDZ, but in some places/States the coast is comprised of multiple, joined NDZs. A report summarizing research conducted by Herrera on NDZs in other parts of the country will be completed as part of this project and will be posted on Ecology's website.

*Is compliance a challenge?* Research into other NDZs has shown that effective education and outreach helps with successful implementation of NDZ. An example was cited of the Great Lakes Region where boaters have been operating under NDZ regulations for years so compliance is now a part of life, not a hardship.

A question was raised as to whether the nearshore (within three miles) is already regulated. Under current regulations, treated discharges (those that have been through a Type I or II Marine Sanitation Devices (MSDs)), are allowed within the three nautical mile zone. Outside the three nautical mile zone treated or untreated waste can be discharged. With NDZ designation, no discharge, whether treated by an MSD or not, would be permitted in any Puget Sound waters including the nearshore zone.

### EPA Petition Process

*Is a cost-benefit analysis required as part of the NDZ petition?* There was interest from the AG in the level of cost-benefit analysis of NDZ that would be included in Ecology's petition. The EPA does not require a cost-benefit analysis, but documentation of the importance of the resource being protected is required as well as documentation of the costs and infrastructure needs for compliance.

*Will Lake Washington and Lake Union be included in the NDZ?* Ecology is including Lake Washington and Lake Union in their research and NDZ evaluation process due to the fact that many vessels travel back and forth between the marine waters and the two lakes. These two heavily used inland resources would benefit from protection. However, it has not yet been decided whether they will ultimately be included within the NDZ boundary if a petition is put forward.

*Are Washington and British Columbia coordinating on the NDZ issue?* Ecology commented that Canada is further behind than the Puget Sound region when it comes to sewage management. Canada does have a similar No Discharge Zone process and does have some established NDZs in certain parts of Canadian waters and so they do have the potential to create NDZs in nearby Canadian waters.

Anecdotally, Canadian boaters in San Juan Islands seem very interested in this issue on a personal level. The general consensus is that boaters want to do the right thing when it comes to pollution prevention.

*If Ecology does move forward with the NDZ petition process, would there be sufficient funds to evaluate the long-term implementation and success of the program?* Those funds are still to be determined, but overall, Ecology is committed to addressing a pollution source that needs attention and evaluating the success of pollution prevention approaches.

### **Pollution sources**

*What percentage of the overall water pollution problem in Puget Sound is attributed to boats?* It is true that vessels are just one of many sources of pollution. This is a challenging question to answer because there are so many different sources of pollutants for a water body; vessels are just one source. Vessels tend to move frequently so they are difficult to track. Combined sewage overflows (CSOs), failing septic systems and stormwater permits are just some of the other sources that Ecology is addressing as well.

Although vessel movement is difficult to track, we do know that while larger volumes of pollutants are coming from commercial vessels as compared to recreational vessels, there may be more cumulative impact from recreational vessels during peak times. Recreational vessels can also travel closer to sensitive water bodies such as shallow bays and shellfish beds while commercial vessels basically travel in shipping lanes.

### **Vessels**

#### Recreational Vessels

*How are recreational vessels accounted for?* There is concern from the boating community that the burden of NDZ implementation falls disproportionately on recreational boaters. The question was raised as to whether it would be more important to track where recreational boaters are going versus where they are moored. The boater survey gave some of this information but it is difficult to track.

The boater survey did address the question of where boaters tend to go to pump out. The AG would like to see a map with shellfish areas (and those areas that need more protection) overlaid with a map of recreational boating travel patterns.

*How was moorage information used to estimate the number of vessels?* A virtual 'fly-over' of Puget Sound was conducted and any place – marinas or mooring buoys - that had 15 or more boats was added to the estimate. The counts included permanent moorages but not transient or dry moorages. Moorages in Lake Washington and Lake Union were included as well as floating homes.

*Enforcement is an important concern for liveaboards, how will their private property be protected if enforcers might be able to enter their homes at any time?* Ecology is sensitive to personal rights and aware of the importance of this issue. However, it has yet to be determined what entity would have authority to board a boat for a sewage issue. Currently Ecology does not have authority to board a vessel; the U.S. Coast Guard currently does have the authority to board.

### Commercial vessels

*How do certain commercial vessels handle their waste?* There are many different categories for commercial vessels that it is important to separate them into operational activities. Cruise ships are under a voluntary agreement to not discharge into Puget Sound but are able to discharge if they meet certain standards. Ecology has made the standards more stringent over the years and for the past two seasons there have been no cruise ships asking to discharge in Puget Sound. Cruise ships are able to hold wastewater for several days and release in the open ocean. They can also use pumper trucks at the piers if needed.

For tugs, using existing pumpout facilities is challenging owing to the size of the vessels and their limited space for a holding tank on board. Tugs generally follow the Coast Guard recommendation of a Type 2 MSDs for compliance. Newer tugs have holding tanks and could potentially use mobile pumpout facilities.

### **Pumpout Capacity and Availability**

*How many pumpout facilities are 'adequate' according to EPA guidelines?* The definition of adequate is not specific. There is guidance on number of vessels per pumpouts which is geared towards recreational, but there is no guidance for commercial vessel adequacy. There has been a push in other regions to include commercial vessels in the equation for "adequate". Ecology has also recently seen this expansion of guidance from EPA Region 10. The key issue for recreational boaters is making pumpout facilities convenient.

While many marinas participate in the Clean Marina Program, there is no requirement that marinas have a pumpout station.

*Some pumpout facilities are locked and therefore not functional, how will this be addressed?* Only a small number of pumpouts are locked and/or need assistance to use so this is not considered a widespread issue. However, if a pumpout station is in need of repairs, there should be a fairly quick turnaround for repair service. State Parks is exploring options to communicate to the public when a station is not working properly.

Also, Washington SeaGrant has created an interactive guide on where to locate pumpout facilities and how to use them (<http://pumpoutwashington.org/>). Washington State Parks is developing a Smartphone app that will indicate where pumpout facilities are located and their hours of operation. (See website for info; <http://www.parks.wa.gov/boating/pumpout/>).

*Will there be funding available to help with repair of current pumpout facilities given Washington State Parks funding shortfalls?* Ecology grant funding may be available to facilities including Parks. A suggestion was made to consider an added tax or surcharge to the pumpout fee that would help cover Washington parks (and other non-private facilities) maintenance costs.

## Wrap Up

The second of two Advisory Group Meetings will be in Bellevue on July 11, 2013 from 9-12. An agenda and details will be provided to participants before July 1, 2013.

Ecology's website on the NDZ Evaluation:

<http://www.ecy.wa.gov/programs/wq/nonpoint/CleanBoating/nodischargezone.html>



# Washington State Department of Ecology No Discharge Zone Advisory Group Meeting #2

July 11, 2013  
Department of Ecology, Bellevue

## **Advisory Group Attendees**

Mark Henley, Department of Ecology  
Kevin Fitzpatrick, Department of Ecology  
Alan Wolslegel, WA State Parks  
Dwight Kruger, Shilshole Liveaboard  
Bob Ranzenbach, Recreational Boaters Association of Washington  
Joseph Gellings, Port of Seattle  
Scott Meschke, University of Washington  
Mark Toy, Department of Health  
Peter Schrappen, NW Marine Trade Association  
Bill Dewey, Taylor Shellfish  
Katelyn Kinn, Puget Soundkeeper Alliance  
Andrew Kolosseus, Department of Ecology  
Dave Fyfe, NW Indian Fisheries Commission  
Heather Trim, Sierra Club  
Mary Knackstedt, Department of Health  
Charles Costanzo, American Waterways Operators Association

## **Meeting Leads**

Amy Jankowiak, Department of Ecology  
Joy Michaud, Herrera Environmental Consultants, Inc.  
Sarah Brace, Veda Environmental (facilitation)  
Nanda Guajardo, Veda Environmental (notes)

## **Meeting Summary**

At this second of two No Discharge Zone (NDZ) Advisory Group meetings, the Department of Ecology (Ecology) explained that they were asking the group to review evaluation findings, serve as a sounding board, and provide input and guidance as they move forward on considering a NDZ for Puget Sound. Veda Environmental (Veda) provided a brief review of the first meeting (held on June 20, 2013) and explained the goals for the day's breakout sessions that focused on three issues: geographic scale for NDZ in Puget Sound, infrastructure capacity, and NDZ implementation. The following pages provide a general summary of the 2<sup>nd</sup> NDZ Advisory Group Meeting comments and discussion.

**General Comments**

The Advisory Group (AG) was interested in learning whether Ecology is considering the option of *not* moving forward with a petition for a NDZ for Puget Sound. In response, Ecology explained that at this time, all options are on the table including designation of entire or portions of Puget Sound, or no NDZ designation. In addition, Ecology is open to all suggestions on boundary limits including an NDZ extending to the Pacific Ocean.

**Breakout Session #1 (Geographic Scale of NDZ in Puget Sound)**

This first break-out session began with Ecology providing a brief summary of evaluation criteria used by other NDZs to define the geographic boundaries. Attendees then separated into three breakout groups (6-8 attendees in each) to discuss various options for setting geographic boundaries and the scale of a Puget Sound NDZ. Each group was asked to discuss pros and cons of a partial, entire, or no NDZ options and to share their views with the entire group. A summary of input from all three groups is provided in the table below.

<b>Designate <u>ALL</u> Puget Sound as NDZ</b>	
<b>PROS:</b>	<b>CONS:</b>
<ul style="list-style-type: none"> <li>• Protects all of Puget Sound</li> <li>• Provides environmental benefits</li> <li>• Easier to implement</li> <li>• Avoids zone boundary confusion or disputes</li> <li>• Eliminates likelihood of debating criteria or defending why areas were or were not included</li> <li>• Avoids “dumping zones”</li> <li>• Political muscle for region</li> <li>• Could lead to a stronger state/province relationship with Canada</li> <li>• Easier to enforce than a partial NDZ</li> <li>• Entire Puget Sound as NDZ easier to understand and would eliminate confusion</li> <li>• Protects tribal interests</li> <li>• Extending NDZ to Neah Bay would move all discharge to outside the Strait of Juan De Fuca</li> <li>• Simpler outreach message</li> <li>• Sends a philosophical message of region’s interest to protect resources</li> <li>• Likely decreases Canadian dumping</li> <li>• Easier to designate the whole area up front than in segments later over time.</li> </ul>	<ul style="list-style-type: none"> <li>• Boaters cannot discharge sewage adequately if there is not sufficient number of pumpout facilities. Many areas lack pumpout capacity.</li> <li>• Some vessels may need to do more to comply than others (such as adding holding tanks)</li> <li>• Costly for boaters, communities</li> <li>• Can create operational hardship</li> <li>• Discourages foreign/out-of-state boaters from entering Puget Sound</li> <li>• Presents enforcement challenges</li> <li>• There may currently be areas in Puget Sound that are so well mixed that NDZ wouldn’t change water quality impact of current practices.</li> </ul>

<b>Designate <u>PARTIAL</u> areas in Puget Sound as NDZ</b>	
<b>PROS:</b>	<b>CONS:</b>
<ul style="list-style-type: none"> <li>• Easy to designate NDZ (as long as there are good pumpout facilities)</li> <li>• Faster implementation</li> <li>• Potential for less economic impact for individual boaters</li> <li>• May be easier to demonstrate impact</li> <li>• Focus resources on sensitive areas</li> <li>• Opportunity to roll-out NDZ as a pilot phase</li> <li>• May be less public opposition</li> <li>• Can designate targeted areas – shellfish or degraded water quality</li> <li>• Can save on resources by conducting targeted outreach and enforcement</li> </ul>	<ul style="list-style-type: none"> <li>• More complicated staging</li> <li>• Could be confusing to boaters</li> <li>• Could create boundary disputes</li> <li>• Would likely open up controversy about why certain areas were protected and others left out</li> <li>• More difficult to enforce</li> <li>• Likely cost more to enforce</li> <li>• Could create “dumping zones” between NDZ segments.</li> <li>• Portions of Puget Sound have poor flushing</li> <li>• Difficult to quantify change in impact</li> <li>• Costly for boaters, communities</li> <li>• Could discourage foreign/out-of-state boaters from visiting Puget Sound.</li> <li>• Harder to target outreach</li> <li>• Much more difficult to expand the NDZ areas later</li> </ul>
<b><u>NO</u> NDZ Designation in Puget Sound</b>	
<b>PROS:</b>	<b>CONS:</b>
<ul style="list-style-type: none"> <li>• Easiest option</li> <li>• Return on investment on existing systems</li> <li>• Most boaters know already not to discharge</li> </ul>	<ul style="list-style-type: none"> <li>• No environmental or public health benefit</li> <li>• May lead to more shellfish closures</li> <li>• Puget Sound would be behind on this issue compared to other parts of country</li> <li>• Sends negative message to the public.</li> </ul>

**Criteria for partial option:**

Also as part of this first breakout session, the groups were asked to identify criteria they might use if they were to move forward with the *partial* Puget Sound option. Key criteria the groups identified included:

- Target NDZ designation to where improvements to water quality would be greatest with regard to dissolved oxygen, nutrients and fecal contamination, including 303d listed water bodies.
- Identify where pumpouts are *not* currently located.
- Include vessel requirements for holding capacity (possible exception of tugs and some NOAA vessels).
- Consider freshwater and navigable waterways including both Lake Washington and Lake Union.

One group identified specific geographic locations that should be prioritized for protection under and NDZ if the partial designation approach was taken. The group also noted that this is likely a partial list since they were limited by time. The suggested list included:

- South Sound
- Hood Canal
- Oak Harbor
- Drayton Harbor
- Penn Cove
- Quartermaster Harbor
- Samish Bay
- Chico/Dyes/Sinclair
- Sequim to Discovery Bay
- San Juan Islands
- Discover Bay
- Liberty Bay

## **Breakout #2: Infrastructure Capacity**

This session began with Herrera Environmental Consultants Inc. (Herrera) providing a brief summary of the presentation made at the first advisory group meeting that focused on research findings on infrastructure capacity and pumpout facility availability across Puget Sound. The presentation also summarized research carried out related to commercial and recreational vessel needs. Attendees divided into two subgroups: one to discuss recreational vessel needs and the other commercial vessel needs. Again, the groups were asked to summarize their findings and these are provided below.

### ***Commercial Vessels***

Some of the findings from the commercial group included:

- There is a need for additional pumpout services in the Tacoma area and at refineries.
- Tugs face a particular challenges in that they stay local and would require pumpout capability along their escort routes.
- Large ships (container and tanker ships) typically follow Annex IV MARPOL which doesn't allow certain discharges, but the Annex IV has not been adopted in the US.
- Most fishing vessels in the Puget Sound –based fleets leave the Sound for extended periods and thus do not rely heavily on pumpouts within Puget Sound.
- Details of operations for tugs were discussed including types of tugs and barges, holding capacity, hours of operation, etc.

### ***Recreational Vessels***

Some of the findings from the recreational group included:

- Overall, more mobile pumpout facilities are preferred, especially in anchorages with 20 or more boats.
- Offering mobile services at a low cost would help incentivize boaters to use pumpouts.

- There should be flexibility in services to accommodate seasonal populations, with mobile pumpouts in locations with increased concentration of boaters. Fixed pumpouts can target places with lower concentration of boaters.
- More oversight of all pumpout facilities/mobile services is needed.
- It was noted that 2 mobile services are considering changing to non-profit status in order to gain access to grant funding to expand their services.
- Private yacht clubs cannot access public grant funds for mobile facilities, although they would be eligible for grant funds if they made their facilities available to the public.
- Access at low tide is an issue for many pumpouts and more pumpouts are needed that offer deeper access for larger boats.

Additional licensed mobile septic trucks are needed. However it was acknowledged that these can be difficult to license and it can be challenging to get adequate length of hoses to reach all boats from shore.

Specific locations identified by breakout groups where pumpout capacity may be limited, included: San Juan Islands especially Sucia, Matia and Jones Islands, South Puget Sound, Hood Canal, and areas with high concentrations of liveaboards. Of particular interest is to increase the number of facilities at 'home' marinas. This is where peak pumpout capacity needs should be better addressed since there is often a large number of boaters returning after a weekend and therefore especially long wait lines for pumpout facilities.

Multiple members brought up the challenge that tugs would face in terms of retrofitting to comply with a full NDZ in Puget Sound. The group and Ecology decided that tugs and their specific issues warranted a more detailed conversation at a later date.

### **Group Discussion: Implementation**

For the final discussion session, Ecology and Herrera shared what has been learned from interviewing other States that have implemented NDZs and some of the lessons learned from these other efforts. A group discussion followed focused on implementation options, logistics and concerns. The following questions and comments were captured from the group conversation.

#### ***How would authority, penalties and funds be handled?***

There was interest in learning where funds from fines for penalties would end up. It is unknown at this time how penalties would be awarded or what would happen with the penalty money. If Ecology administered the penalties then the money would go in the general coastal protection fund and used for various restoration and water protection projects and actions. Depending on how enforcement authority is delegated, the fines could go either directly to those entities or to a general fund. There is definitely an interest in having the fine money go to protecting water quality.

#### ***Is the Coast Guard involved in the NDZ process?***

The AG was interested in learning how closely Ecology is working with the Coast Guard on the Washington State Department of Ecology

NDZ issue. The Coast Guard is aware that Ecology is evaluating a NDZ. Ecology and the Coast Guard work together on cruise ships issues, but vessel sewage has only been enforced by the Coast Guard at this point (no other agency). EPA would administer the NDZ under the Clean Water Act and is currently the go-between with Ecology and Coast Guard.

***How will live-aboard vessels be handled in the NDZ process?***

There was the question raised about an entity other than Coast Guard boarding “liveaboards”. Only the Coast Guard can board boat without probable cause. It was noted that the County Sheriff can board a vessel with *probable* cause or permission. Ecology is aware of the privacy concerns of liveaboard residents and will consider this as it explores enforcement options.

***What will be the process for adding new facilities?***

With areas identified that need more fixed pumpout facilities (such as in the San Juan Islands), the AG wanted to know about the process moving forward. Ecology and State Parks will need to have a follow-up conversation about how to make sure that funding/grant money gets to the organizations that can implement such facilities. A comment was made that mobile units are owner-operated so they are generally better maintained than fixed facilities, which are typically self-service (and thus a potential disincentive). The question was raised on the typical cost of small basic portable pumpout facility - roughly \$2,000.

***How will success of the NDZ be measured?***

The AG asked if there are findings in the literature on surveys that may have been carried out in other NDZ’s regarding about boater’s attitudes pre- and post NDZ. No information specific to this question was identified during the interviews with the other States. Measures of success of a NDZ could include fewer beach closures and increased open/approved shellfish areas, the volume of sewage pumped out, boater surveys, and local or overall water quality improvements.

***What outreach tools and opportunities exist?***

Education and outreach will be important to implementing a NDZ. Suggested education and outreach ideas:

- Ecology should work together with marinas, harbors, and boating associations to develop an outreach plan.
- Education should be linked with the boat permitting process, for example by adding questions to the boater registration application.
- Clean Marina program could fold in NDZ outreach. There is a current sense of pride/support from participants in this program already, we can build on the Clean Marina’s program success and commitment. Leverage Clean Marina certification as an outreach tool.
- Build on Washington Sea Grant’s existing boater education work.
- For many people/boaters in other parts of the country that have implemented NDZs, there is a strong level of pride for supporting clean waters.
- Web/app-based services (similar to “Uber limo service”) where one can scroll through available services, click to order the one you want, see ratings for facilities, etc.

- Apps that identify the NDZ area, pumpout locations, ways to contact pumpout services and notify if a pumpout is not working properly.
- Private enterprise would benefit greatly with the creation of more mobile pumpout facilities. (NOTE: The group wonders how to support this endeavor.)

### **Wrap up**

Ecology thanked the AG for all of their work and explained that they will now review all of the feedback as they work towards decisions. If moving forward with a petition to EPA, there would be an opportunity for comment on a draft petition and then again if EPA accepts a final petition and posts to the Federal Register.