



Puget Sound No Discharge Zone Implementation Strategy

A Framework for Action

By
Justine Asohmbom

Washington State Department of Ecology
Northwest Regional Office
Bellevue, Washington

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Contact Information

Water Quality Program

Northwest Regional Office
3190 160th Ave SE
Bellevue, WA 98008
Phone: 425-649-7000

Website¹: [Washington State Department of Ecology](http://www.ecology.wa.gov)

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Table of Contents

Acknowledgements	6
Introduction	7
Implementation Strategy	10
Goals and Objectives	12
Target Audience	12
NDZ Implementation Stakeholders	14
Ecology’s NDZ Project Team	14
NDZ Education and Outreach Committee	14
NDZ Enforcement Committee.....	15
Social Marketing Approach	16
Strategies for Recreational Boaters	19
Multi-media ‘Pump Out, Don’t Dump Out’ Campaign	19
No Discharge Zone Website.....	20
No Discharge Zone story map.....	21
NDZ Signage at point of use locations	21
Signage at marine and fishing supply stores	25
Promote Pumpout Nav App.....	25
Social Media campaign	27
Notifications to vessel groups and associations.....	28
NDZ information in vessel registration renewal paperwork	28
Engage the media	29
Information booths at boating events.....	29
Strategies for Marina and Pumpout Station Owners	30
Marina Outreach and Trainings	30
Dye Tab Pilot Program	31
Dockwalker Program and Trainings	31
Strategies for Commercial Vessel Operators	33

Notifications and Presentations	33
Strategies for Mobile Pumpout Operators	34
Partnerships with Mobile Operators	34
Strategies for Secondary Audiences	35
Educate Employees who interact with Boaters.....	35
Key NDZ Messages	36
Implementation Partners	37
Enforcement Strategy.....	40
Program Evaluation	41
Conclusion.....	42
Appendix A. Enforcement Strategy	43
Appendix B. Dye Tab Pilot Program.....	53
Appendix C. Recreational Boaters Survey Results.....	68

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This document is an update to the successfully implemented strategies and activities detailed in the 2016 [No Discharge Zone Implementation Strategy – A Framework for Action²](#) that were potential ideas on paper.

² <https://apps.ecology.wa.gov/publications/documents/1610016.pdf>

Introduction

Background:

Puget Sound has been designated a no-discharge zone (NDZ) for vessel sewage. It is illegal to discharge treated or untreated sewage (blackwater) from vessels into Puget Sound. The rule ([WAC 173-228³](https://apps.leg.wa.gov/WAC/default.aspx?cite=173-228)) became effective May 10, 2018.

Why a No Discharge Zone for Puget Sound?

Puget Sound is a unique and sensitive environment that is prone to poor water quality conditions as a result of limited circulation patterns, especially in the bays and inlets. Sewage from vessels, which is much more concentrated than household sewage, can potentially affect water quality and pose a risk to public health. Even small amounts of sewage discharges over or near shellfish beds can cause enough pollution to require harvest closures.

Approximately, there are 153,000 registered recreational vessels and 3,600 commercial vessels in the Puget Sound area. Because vessels move throughout Puget Sound, they can especially affect sensitive resources such as shellfish growing areas, marine protected areas, aquatic reserves, and public beaches. Such areas can be impacted by bacteria - studies show vessel sewage contains an average of more than 2 million coliform forming units in 100 milliliters of water (cfu/100 ml), much higher than our State's legal standard of 14 for public health and water quality protection. Sewage also contains nutrients that contribute to low levels of dissolved oxygen – which fish and other marine life need – in many parts of the Sound.

Eliminating vessel sewage discharges in the No Discharge Zone serves to improve water quality for the health of aquatic species and people who recreate in the waters of Puget Sound.

What does the rule require?

Operators of vessels with **Type I or Type II Marine Sanitation Devices (MSDs)** must secure their devices to prohibit the discharge of treated sewage while in the NDZ. Acceptable methods include:

- Closing the seacock and removing the handle.
- Padlocking the seacock in the closed position.
- Using a non-releasable wire-tie to hold the seacock in the closed position.
- Locking the door to the space enclosing the toilets with a padlock or door handle key lock.

Boaters of vessels with Type III MSDs, or holding tanks, must operate in a manner that stops any discharges of the collected sewage while in the NDZ. They can empty their tanks using

³ <https://apps.leg.wa.gov/WAC/default.aspx?cite=173-228>

stationary pumpouts, mobile pumpouts, pumping services (barges, trucks), or discharge outside the NDZ (in accordance with Federal requirements, this must be more than 3 miles offshore). Vessels without installed toilets must dispose of any collected sewage from portable toilets or other containment devices at facilities in a manner that complies with state law (WAC 173-228-040(3)). These vessels can dispose of their collected sewage at a facility ashore, such as a dump station.

Exceptions

The following vessels have until May 10, 2023 to comply with the NDZ Rule (WAC 173-228-050):

- Tug boats.
- Commercial fishing vessels.
- Small commercial passenger vessels (less than 249 overnight passengers).
- NOAA research and survey vessels.

These vessels are still required to comply with existing state and federal discharge regulations in the interim. There is also an exception for public vessels actively involved in emergency, safety, security, or related contingency operations where it would not be possible to comply with the NDZ.

Early Implementation

Our approach to encouraging boaters to comply with the NDZ rule has first and foremost been through outreach and education. Initial outreach efforts began in 2011 with the NDZ development and continued ever since with the rule rollout in May 2018. We established the NDZ Outreach and Education Committee as a means of communicating and coordinating with partners. These efforts have provided a strong foundation and momentum to motivate boaters to comply with the rule.

Past implementation did not involve enforcement mechanisms; however, determining how to enforce the NDZ was a key part of our work in 2020. We leveraged the expertise and experience of members of the NDZ Enforcement Committee during the development of the new enforcement strategy, which is included as part of this Implementation Strategy.

We greatly appreciate our partnership with Washington Sea Grant, Washington State Parks (State Parks), and Puget Sound keeper Alliance who have been instrumental in educating boaters about vessel sewage best management practices. State Parks have funded almost 100 sewage pumping stations in and near the NDZ, with additional stations along other Washington waters. Boaters have embraced this service, making high use of pump-outs. Evidence of this can be found in Pumpout usage data provided by State Parks for those facilities that have received Clean Vessel Act grant program funding. Pumpout volumes have been increasing yearly since 2013, with an estimated 11 million gallons pumped out in 2019, an increase of about 800,000 gallons since the NDZ went into effect in 2018. Public awareness of these convenient stations, combined with interest in protecting Puget Sound, has removed some of the barriers to NDZ compliance.

Puget Sound No Discharge Zone Map

The Puget Sound Vessel Sewage No Discharge Zone includes all Washington marine waters east of New Dungeness Lighthouse, at the east end of the Strait of Juan de Fuca, plus Lake Washington, Lake Union, and the waters that connect them to Puget Sound (Figure 1).

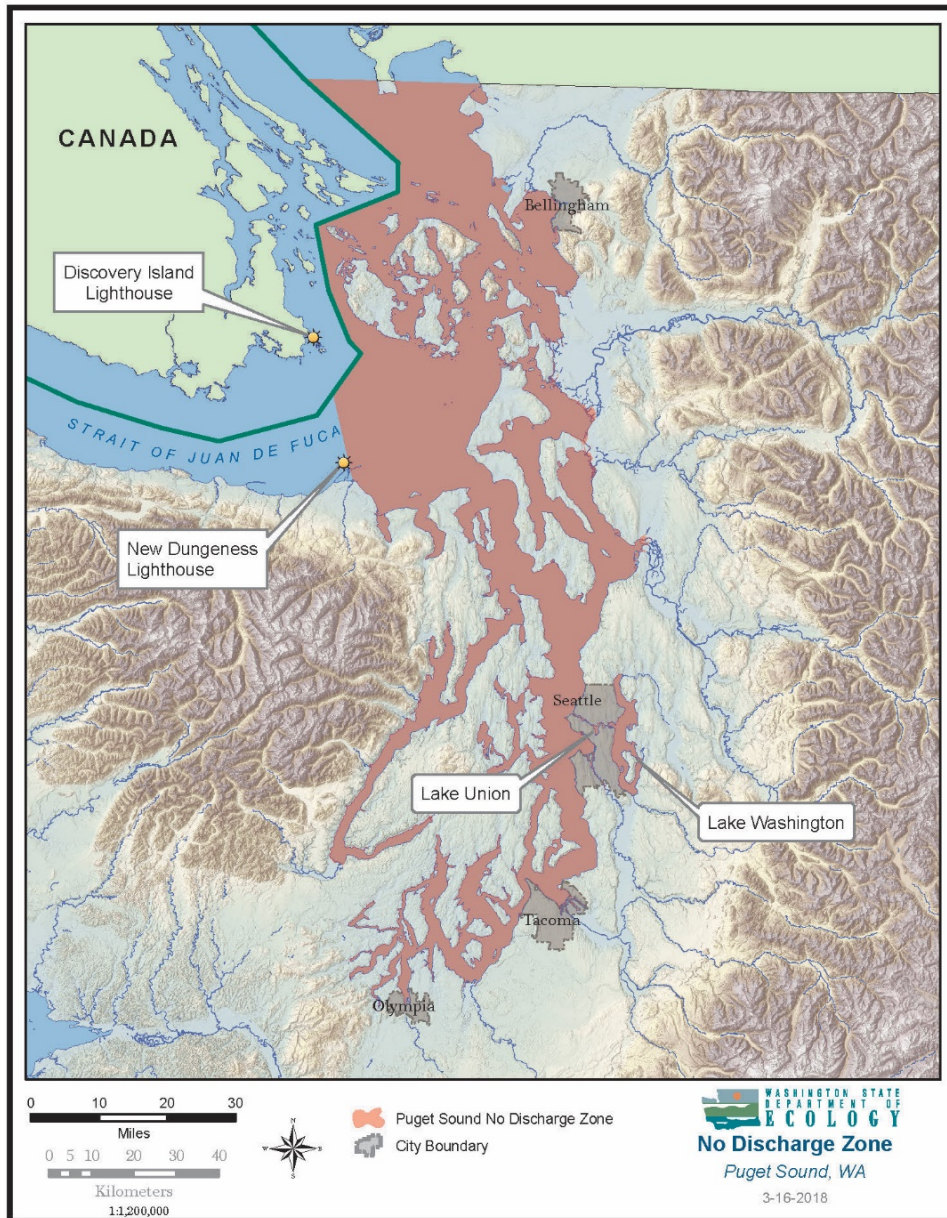


Figure 1 Map of Puget Sound Vessel Sewage No Discharge Zone

Implementation Strategy

This Implementation Strategy serves as a guide for implementing the NDZ rule, incorporating education and outreach along with a plan for enforcement. It provides a framework for educating recreational boaters and commercial vessel operators about the NDZ and how they can manage sewage generated aboard their vessels.

Effective implementation and long-term success of the NDZ requires strong leadership, a coordinated approach, and commitment from partners. We provide leadership to help maintain collaborative relationships with partners and coordinate the delivery of plan activities. This Implementation Strategy describes:

- Goals and objectives
- Target audiences
- NDZ Implementation stakeholders and their roles
- The social marketing approach
- Strategies and implementation actions
- Key messages
- Partners and their resources
- The enforcement strategy

Appendix A describes the enforcement strategy and the responsibilities for Ecology and each partner agency to ensure effective implementation of a comprehensive enforcement plan.

Appendix B provides a description of a Voluntary Dye Tab Pilot Program for marinas.

Appendix C includes the results of the social marketing research study for recreational boaters.

It is important to note that this Implementation Strategy recognizes the need for more funding to support social science research beyond the realm of recreational boaters. There is a need to identify effective strategies for other segments of the target audience and repeated NDZ education and outreach campaigns because long term behavioral changes require consistent and repeated messaging.

This strategy is a living document that can be expanded and updated with more information, tools and best practices as progress is made and lessons learned.

The graphic below shows how NDZ education and outreach will work alongside enforcement. Education and Outreach is the central strategy in the NDZ implementation and it will go hand in hand with enforcement.

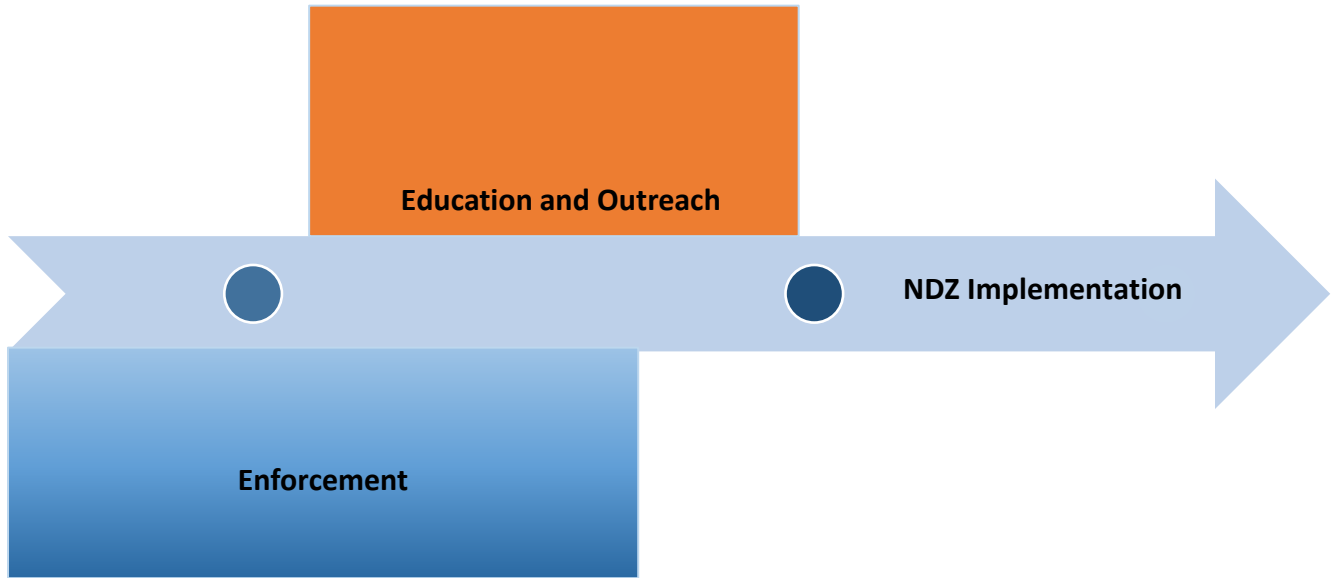


Figure 2 Graphic presentation of education and outreach working together with enforcement

Goals and Objectives

The overall goals of the implementation strategy are to:

- Increase proper disposal of vessel sewage.
- Increase boater awareness about the NDZ requirements, the reasons for them and locations of pump out facilities so that they comply with the requirements.
- Build and sustain strategic partnerships to develop and implement coordinated NDZ education and outreach.
- Ensure that NDZ messages are cohesive and delivered in an efficient, effective and coordinated way across partner education programs.
- Provide guidance and resources to partners who have a role in providing education and outreach about the NDZ requirements.
- Implement an enforcement program that builds on existing resources to prevent non-compliance.

Target Audience

Audiences have been defined as “primary” and “secondary.” Primary audiences are those who are required to comply with the law or will likely be impacted.

It is important to note that audiences have distinct characteristics, interests and needs requiring targeted approaches to messaging, materials, and distribution of information.

Primary Audiences

This strategy identifies four priority audiences:

- Recreational vessel owners and operators
- Marina and pumpout station owners and operators
- Commercial vessel owners and operators
- Mobile pumpout service operators

Secondary audiences are those people who can help reach and inform primary audiences and whose support is necessary to ensure the successful implementation of the NDZ.

Secondary Audience

- External partners and stakeholders who play a critical role in the success of implementing the NDZ, particularly with regard to outreach, education; and enforcement.
- Internal stakeholders –frontline employees who work with boating community.
- People who work in boat sales and talk to boat owners.
- Environmental/Conservation public – people who care about environmental and conservation issues, including wildlife viewing – divers, sea food consumers, waterfront restaurant and attraction owners and staff.

A description of each target audience, strategy, along with some key actions needed to implement the strategy are outlined below.

NDZ Implementation Stakeholders

The ability to engage diverse partners and stakeholders who are interested in the NDZ is critical to its success. Ecology is the lead agency charged with implementing the NDZ rule; however, preventing discharges of vessel sewage into Puget Sound is most successful when stakeholders work together. We appreciate the valuable contribution that each stakeholder has made and continues to make.

Stakeholder groups referenced in this Implementation Strategy have different levels and types of involvement in NDZ implementation.

Ecology's NDZ Project Team

Ecology's NDZ Project Team are responsible for coordinating the Education and Outreach Committee and Enforcement Committee, described below, guiding implementation, providing information about the NDZ rule to internal and external stakeholders, and any legislative needs related to the rule.

NDZ Education and Outreach Committee

The success of the NDZ depends on a well-coordinated implementation, so it's important that the cross-agency **NDZ Education and Outreach Committee** continue to guide and support implementation. This Committee includes the Ecology NDZ Project Team and a range of other key governmental and non-governmental stakeholders (such as boating associations) who play a role in communicating NDZ messages to their members or programs. The Committee meets approximately twice a year, based on project needs. There is also a *sub-group* of the Education and Outreach Committee, called the "**Education and Outreach Core Team**" who are actively engaged in boating and vessel sewage outreach and education. The Core Team convenes every two months, and includes representatives from:

- Washington Sea Grant
- Puget Sound keeper Alliance (manages Clean Marina Program)
- Washington Department of Health
- Washington State Parks (manages Clean Vessel Act grants)
- Washington Department of Ecology

Implementation Actions:

The main task of the NDZ Education and Outreach Committee is to support the implementation of programs working to prevent vessel sewage in Puget Sound waters. While the Committee members work on separate programs (for example, Ecology leads the NDZ, State Parks administers the Clean Vessel Act grant for Pumpout installation and maintenance, Washington Sea Grant focuses on educating boaters and marinas on Pumpout usage, and Puget Sound

Keeper Alliance manages the Clean Marina Certification Program) working together will enable us and our partners to speak with a unified voice, provide accurate, and consistent information to the target audiences. Specifically, the NDZ Education and Outreach Committee enables us to:

- Plan and coordinate vessel sewage education and outreach activities.
- Integrate NDZ messages into existing marine education and outreach programs.
- Support the implementation of a multi-media vessel sewage education campaign.
- Share No Discharge Zone information and resources.
- Support the evaluation of NDZ education and outreach efforts to track progress and make improvements.

NDZ Enforcement Committee

While the preferred approach to NDZ rule compliance is through education and outreach, the ability to prevent vessel sewage discharges also includes having a means to deter violators with enforcement. A successful enforcement strategy requires clear authority delineation, a fair penalty system, clear messaging as to why vessel sewage prevention is necessary, and consistent application of deterrence mechanisms.

Because success will rely on existing resources, it's important that the cross-agency *NDZ Enforcement Committee* continue to help coordinate and support the enforcement strategy. This Committee is composed of some of the same stakeholders as the NDZ Education and Outreach Committee in addition to a number of stakeholders with regulatory responsibilities, including:

- Department of Ecology's Spill Prevention, Preparedness and Response Program
- Washington Department of Fish and Wildlife
- United States Coast Guard (USCG)
- County and city law enforcement representatives

Key actions of the Committee have included identifying current and necessary enforcement authorities and mechanisms, identifying any potential laws, rules, or regulations changes, evaluating current enforcement approaches and logistics, and developing an overall enforcement strategy.

We used the social marketing approach understand and segment the target audiences. We employed the expertise of Great Lakes Marketing who, in partnership with Talitha Consults, conducted stakeholder interviews and two recreational boaters' surveys (samples size of 4,195 and 1,733).

The aim of the first survey was to understand boaters' awareness, sentiments, and behaviors associated with the NDZ while the second survey tested potential messaging. The research was conducted from March 2020 through October 2020. Survey questions included information about the type of boat, type of toilet or MSD equipment on board, use of pumpout services and opinions about accessibility, knowledge about the NDZ rule, motivators and barriers to complying with the rule. Appendix C includes a summary of findings and recommendations from the social marketing research study. We used the data collected to inform this Implementation Strategy.

The research identified barriers that may prevent boaters from complying with the NDZ rule. These barriers include a lack of understanding of the rule, not believing it is important, inconvenience, and lack of knowledge on how to use pumpout stations.

The research study concluded that achieving compliance with the NDZ is both an **operational issue** and a **marketing issue**. For recreational boaters, education is only a part of the compliance equation. It is also important that pumpout stations are plentiful, conveniently located, fully functioning, and easy-to-use. The research also highlighted the following:

- The target audiences extend beyond those who live in Washington (and the US), so efforts must be made to reach people at their point of use (i.e., when they charter a boat, launch a boat, cross a border, etc.).
- Messaging needs to focus on both the punishment and the gain (i.e., consequences of illegal discharging and the value of appropriate behavior).
- Compliance can be enhanced by messaging that creates a desire to make an effort to follow the NDZ guidelines.
- The message must be shared through a coordinated multimedia campaign (print, videos, posters, rack cards, magazine ads, and social media). Different communication channels are needed to reach the many user groups in order for boaters to remember the message and comply with the rule over the long-term.
- Signs at marinas and other point-of-use locations should serve as reminders for boaters to integrate a stop at a pumpout station into the plans. (Locations should include relevant retailers, launch sites, etc.)
- Boaters need access to real-time information to integrate the use of pumpout stations into their boating excursion
- Boaters want to know the location of pumpout stations and real-time data about status, preferably on a smartphone app and the exact boundaries of the Puget Sound NDZ.

Based on the results of the audience research, communicating effectively with the different segments of the boating community about the NDZ rule requires a multi-pronged approach that builds from year to year. The strategies outlined for each target audience are based, to a large extent, on the recommendations from the social marketing research study and also what proved successful in other states.

A description of each strategy, along with some key actions needed to implement the strategy are outlined. We are building on the education, outreach and enforcement efforts that already exist within state, local, and non-profit organizations. These core strategies help guide the implementation of an integrated education and outreach program with tested messages designed to reach each target audience through multiple touch points as they go about their boating activities.

Strategies for Recreational Boaters

The strategies for recreational boaters are based on the findings of the social marketing research study conducted in partnership with individuals and groups directly affected by the NDZ rule.

Two segments of recreational boaters are the primary target audience for the initial phase of a coordinated, multi-media campaign implementation.

1. Those who keep their boat at a marina/yacht club
2. Those who typically trailer their boat to water

Multi-media ‘Pump Out, Don’t Dump Out’ Campaign

A successful multi-media campaign has the power to increase awareness of the NDZ and motivate boaters to pump out their vessel sewage into appropriate receptacles instead of discharging into Puget Sound waters. Given that the research study showed that the communication channels are different for each segment of the target audience, we’ll use a combination of different channels such as social media, magazine Ads, signage, videos, graphics and more. We’ll produce compelling visuals with simple but memorable symbols that will serve as powerful “triggers” to motivate action and remain in boaters’ minds in the long term. The NDZ slogan **‘Pump Out, Don’t Dump Out – It’s the Law’** and the spokesperson – Sam the Clam and the shellfish friends will help connect the pieces of the campaign together in a meaningful way.

Implementation Actions

- Work with partners to create the campaign launch action plan.
- Prepare and run promotional advertisements with Sam the Clam-the campaign spokesperson.
- Produce Public Service Announcements (PSA) to educate and drive boaters to educational resources.
- Purchase and run print-based and web-based advertisements and articles in well-established and popular Boating magazines.
- Create and post messages and advertisements on key social media platforms.
- Participate in interviews such as local radio shows.
- Work with partners to implement the campaign.
- Conduct ongoing evaluation to adapt and make improvements.

Campaign Toolkit

We will develop and/or purchase educational materials to support the implementation strategies. Equipping partners with key messages and tools will make it easier for partner organizations to more effectively engage and educate boaters about NDZ.

- Produce a **Pump Out, Don't Dump Out campaign** toolkit (*NDZ logo , Ads, videos, Infographics, banner displays, rack cards, brochures, signs, posters, magnets, stickers* and branded items with campaign messages) with a consistent look and feel but also allows flexibility for each organization to deliver the message in its own way.
- Conduct A/B testing of the materials to identify the ones that resonate with the target audience.
- Develop and produce training resources for secondary audiences, such as frontline employees (Fact sheets and FAQ)
- Purchase educational gadgets such as floating key chains, Sam the Clam mascot, fuel bibs with NDZ branded messages, NDZ flags etc...)

No Discharge Zone Website

Web site resources make it easy for target audiences to find useful and consistent information online. Pumpout Washington website is the go to site for all vessel sewage education and outreach. We will update Ecology's NDZ website and cross link to Pumpout Washington website and use it as a channel to deliver tailored content and information and encourage partners to link to it.

Implementation Actions

- Create an Educational Resource page on Ecology's NDZ website and update with campaign resources
- Crosslink/cross promote the NDZ website on other partner websites and social media platforms.
- Work with WA Sea Grant to update Pumpout Washington Website with NDZ campaign resources.
- Create an interactive online map of the NDZ with boundaries.
- Promote PumpoutWashington.org website during multi-media campaign, alongside the NDZ messages
- Track progress and effectiveness in reaching audiences by collecting website analytics.

No Discharge Zone story map

Story mapping is an innovative way to integrate maps, video, photos and more into a narrative on the web. The story map tool will help visually tell the NDZ story, show the locations of the pumpout stations and actively engage the audience through the web.

Implementation Actions

- Develop a story map showing the pumpout stations on the NDZ websites.
- Link existing videos and/or create and post online video on the demarcation of the NDZ, how to pump out or how to download the app etc.
- Share this tool with partners to use in their education and outreach.
- Provide links to educational materials.
- Promote story map with the boating community.

NDZ Signage at point of use locations

One common strategy in social marketing for encouraging behavior change is the use of prompts in places where the behavior takes place. Signs with NDZ messages located at boat launches and marinas will serve as visual prompts to remind boaters that they are in the NDZ and what they should do to manage their vessel sewage. We'll work with our partners to find the most appropriate locations for installing both stationary and mobile (e.g. sandwich board) signs.

Implementation Actions

- Design and print signs with agreed-upon messages.
- Determine criteria and prioritize locations for signage.
- Work with Department of Natural Resources, Department of Fish and Wildlife, State Parks, municipalities, and the Ports to obtain approval to post NDZ signs.
- Post the informational signs with NDZ messages at the agreed upon locations.

Figure 2 illustrates the Department of Fish and Wildlife water access areas in the Puget Sound region. The blue dots represent access points that are currently actively managed. The black dots represent access points that are no longer actively managed. We will work with the Department of Fish and Wildlife to identify the highly accessed areas and post NDZ signs at those locations.

Figure 3 and 4 illustrates the Department of State Parks' boating access areas in Puget Sound. Figure 4 states the Park's acreage and category.

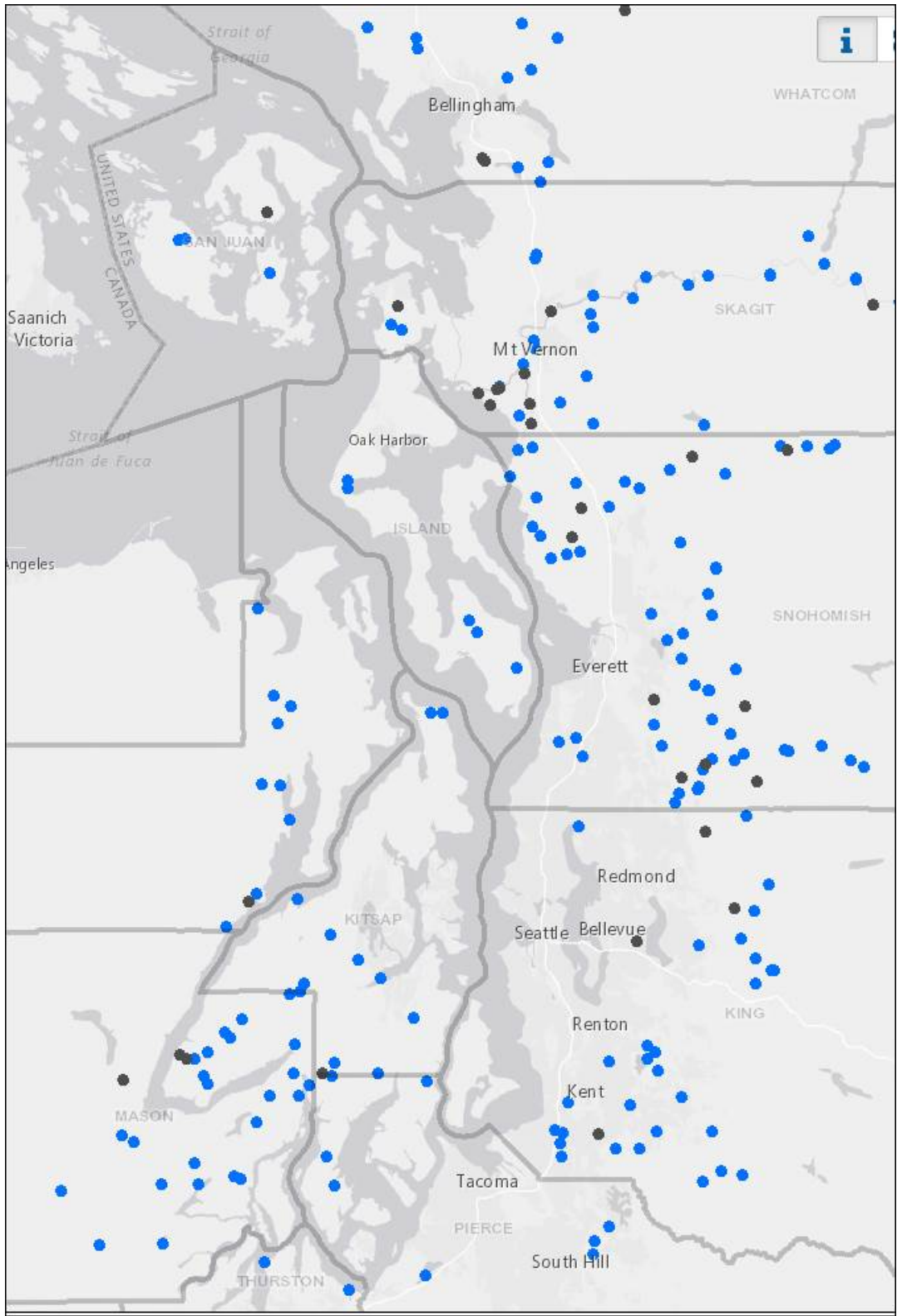


Figure 4 Map of Department of Fish and Wildlife water access areas

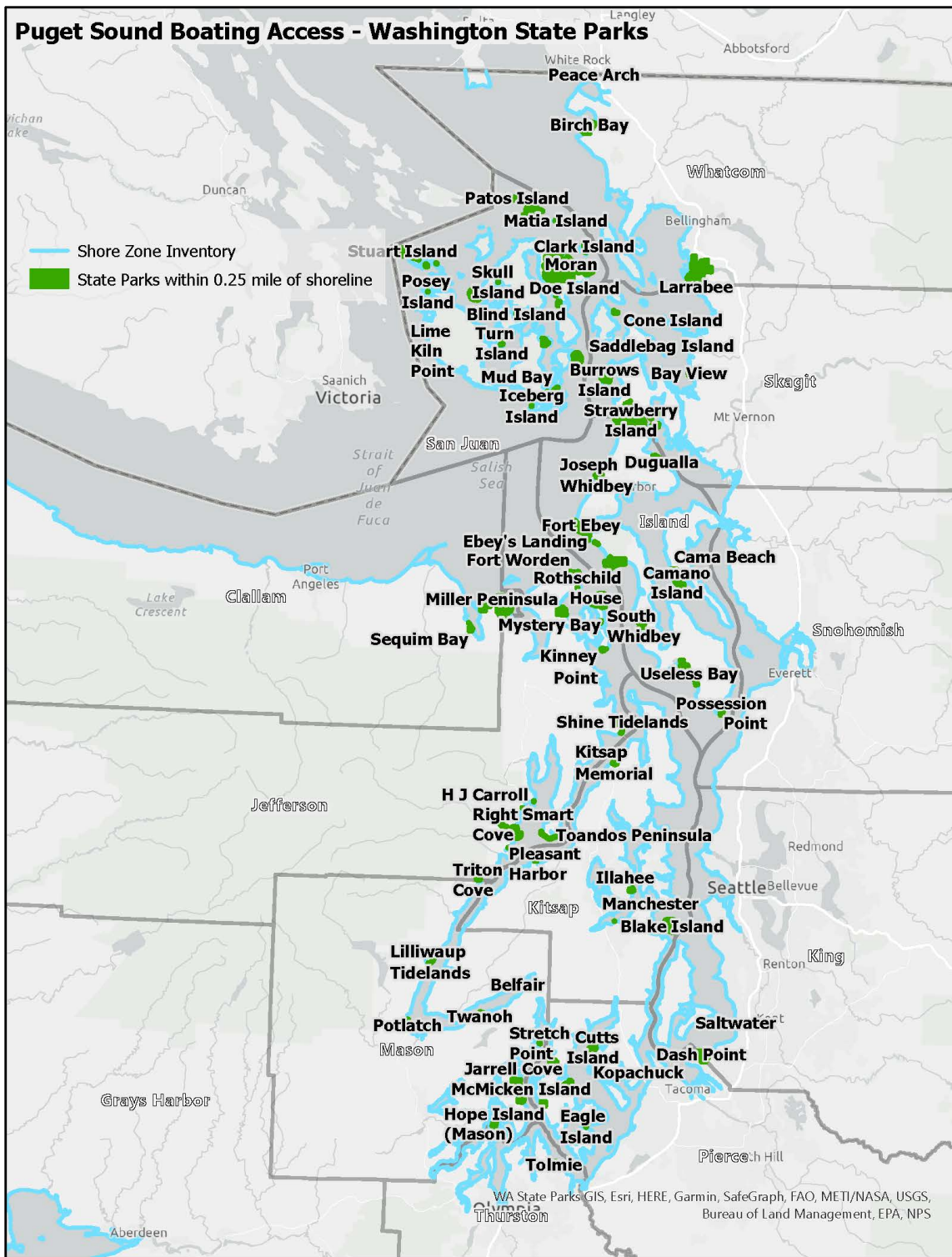


Figure 5 Map of State Parks Puget Sound boating access



Figure 6 Washington State Parks within Maritime Washington National Heritage Area

Signage at marine and fishing supply stores

The social marketing research study results indicated that, of the recreational boaters surveyed, 44% get boating information from marine and fishing supply stores. Signs at these locations will serve as good reminders about the NDZ.

Implementation Actions

- Identify and prioritize supply stores for signage.
- Contact store managers for approval and identify other appropriate outreach materials that could be provided for distribution to their customers.
- Coordinate and distribute outreach materials and post signs where possible.
- Evaluate the effectiveness of this strategy in reaching the target audience and make improvements as needed.

Promote Pumpout Nav App

“Pumpout Nav” is a free iOS and Android mobile app that shows the nearest pumpouts relative to a boater’s location on a map and list its operational status. Within the app, a pumpout icon appears as a green place marker on the GIS-based map. When a boater taps on the icon, information about the Pumpout station will appear. Information includes the operational status, specific location of the Pumpout at a marina or other area, cost and contact details. The Pumpout Nav app also indicates the boundaries of the No Discharge Zone and brief information about the NDZ rule and Washington boating laws.

The app is designed to empower the boater. They can report if there is a problem with the pumpout such as —“no power,” “low vacuum,” “leaking,” “broken parts,” and “no access”. Boaters can also enter a specific description of the problem and/or upload images. This information is transferred to the State Parks Clean Vessel Act grant Program Manager.

Implementation Actions

- Include App Icon and how to download it in NDZ signs, sandwich boards, posters, brochures, newsletter, emails, and other outreach materials.
- Promote the FREE APP in boating magazines with a QR code or how to download instructions.
- Encourage the boating community and agency partners to include the Pumpout Nav app on their outreach materials such as newsletters.
- Collaborate with local jurisdictions to promote NDZ and App.
- Work with the app developers and partners to manage, maintain and update app as needed.
- Conduct evaluation with boaters and make improvements.

Figure 5 shows the Pumpout Nav App icon on a phone. Figure 6 is a map showing the locations of pumpout stations on a map in the app. Figure 6 highlights the page on the app that lets you report any problem with a pumpout station.

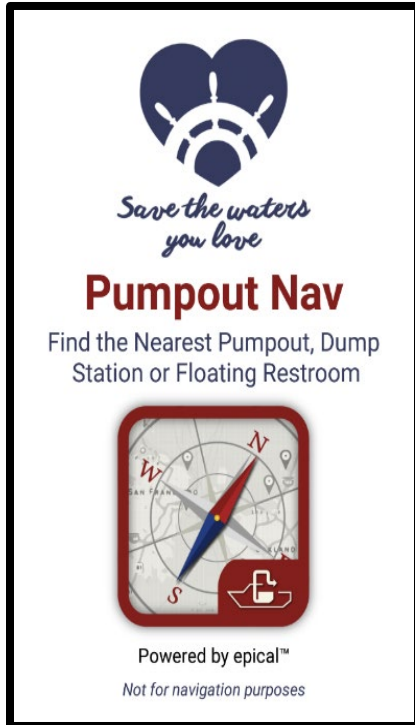


Figure 9: Screenshot of the Pumpout Nav App

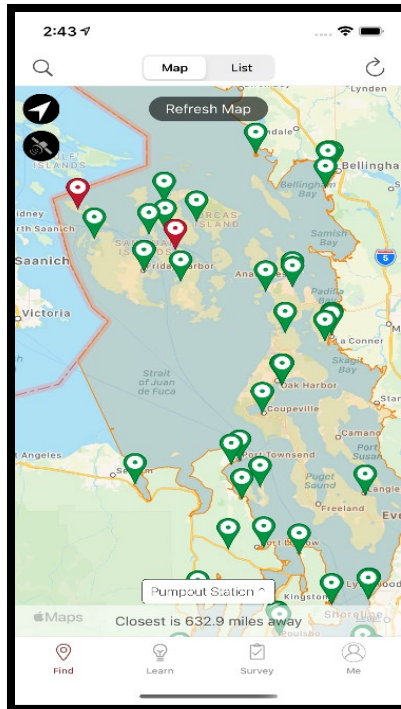


Figure 7: Screenshot of the Pumpout Nav App showing icons for pumpout stations locations

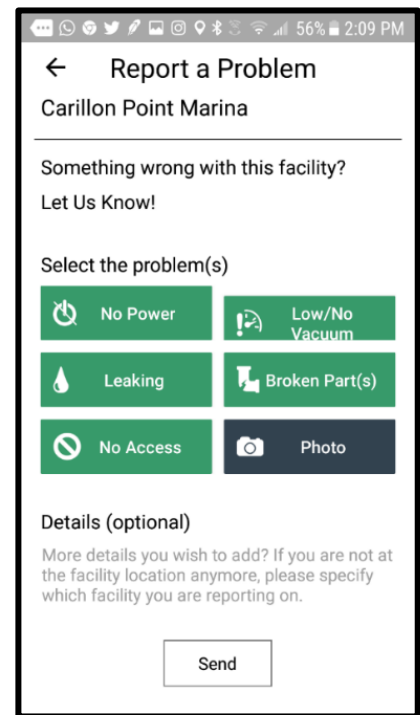


Figure 8: Screenshot of the page to Report a Problem on the Pumpout Nav App

Social Media campaign

Social media is the fastest growing way to reach out to target audiences. It is a two-way communication tool that requires a well-thought-out plan and a balance of pushing out relevant information and engaging in the online conversations. We will develop coordinated, consistent campaigns for Twitter, Instagram, Facebook and other platforms to engage boaters.

Implementation Actions

- Create social media content that partners and stakeholders can use to promote the NDZ through their social media accounts, including template tweets and Facebook posts. These include but not limited to infographics, short educational videos on key topics such as:
 - What is the No Discharge Zone? Include the physical boundary demarcation.
 - How to prevent vessel sewage discharges and why it's important
 - How to download the Pumpout Nav App
 - How to use pump stations
- Use a unique hashtag such as #PSNDZ in all social media activity.
- Create editorial calendar to guide tweets, posts and digital content push out through social media.
- Leverage Ecology's followers on Facebook @ecologywa and Twitter @ecyseattle accounts.
- Coordinate serial social media activities, such as re-Tweets, shares and re-posts. Serial media post aims to capture the boater's attention and keep them coming back with each update.
- Post a steady stream of NDZ facts and visuals that are easily understood and interesting to boaters every boating season.
- Engage boaters with one-question poll *or* trivia questions about NDZ
- Create a challenge (design video, pumpout arts) with prizes such as swag
- Leverage well-known boater community opinion leaders who can deliver the message credibly.
- Encourage boaters to share their experiences and promote NDZ messages.
- Evaluate social media efforts and make improvements.

Notifications to vessel groups and associations

Many boaters belong to boating associations and this provides another opportunity to share information about the NDZ with them through their association communications channels.

Implementation Actions

- Provide template language to partners to customize and use in their newsletters, listservs and outreach materials.
- Face-to-face presentations at vessel association meetings such as Harbor Safety meetings.
- Provide information and/or attend vessel group and association meetings or ask to be included in notifications to deliver NDZ messages.
- Provide articles for use in association newsletters.
- Send informational emails to association members with information/links.
- Provide opportunities for face-to-face meetings with individuals or groups to talk about the NDZ, answer questions, and clarify information.

NDZ information in vessel registration renewal paperwork

Recreational and commercial boaters are required to obtain licensing from the Department of Licensing. As such, we believe another strategic location to communicate about the NDZ is at DOL offices and on the DOL website. We will work with the Washington Department of Licensing to include NDZ information sheet in the vessel renewal paperwork.

Implementation Actions

- Create information sheets or posters.
- Identify the right contacts and work with DOL staff.
- Provide engaging and easy-to-use content and educational materials, based on messaging research.
- Post signage at DOL offices in the Puget Sound region.
- Work with DOL to include the NDZ information on the DOL boater registration webpage.

Engage the media

Providing consistent information to the media will help in the effort to reach many boaters. An effective media approach will entail engaging a variety of media outlets. The aim is to provide information that is accurate and easy for the media to communicate to their audiences.

Implementation Actions

- Engage Ecology's communication managers to update NDZ Communication Plan and messages.
- Coordinate with communications managers or points-of-contact at partner agencies.
- Identify and train spokespeople who can speak knowledgeably about NDZ with reporters and bloggers.
- Provide engaging and easy-to-use content to our partners.
- Tell the NDZ story as the need arises.
- Determine a reasonable schedule for providing regular updates to media outlets and issue updates in accordance with Communication Plan.

Information booths at boating events

We will conduct additional outreach activities such as tabling at boating events and other events to provide information about the NDZ. Some of these events may include:

- Seattle Boat Shows
- National Marina Day (June)
- Clean Marina Award event
- Clean Green Boating Festival
- Opening day of the northwest boating season
- Wooden Boat Festival, Port Townsend
- Pacific Marine Expo
- Pacific Coast Congress of Harbor Masters
- Washington Public Ports Association (WPPA) events
- Summer Sea fair, Seattle
- Lake Union 4th of July
- Anacortes Boat and Yacht Show

Implementation Actions

- Prioritize events and apply to participate at the boating events.
- Plan and prepare outreach materials
- Work with the organizers and host NDZ informational booth at boating events.
- Coordinate with partners who attend these events to provide educational materials to display at their booths when we cannot attend.

Strategies for Marina and Pumpout Station Owners

Marina staff (harbormasters, managers, and support staff) are directly engaged with recreational boaters who use their facilities on a long and short term basis. Marinas also have the ability to define vessel operational protocols that must occur at their marina as part of their lease agreements.

The Clean Marina Program and the EnviroStars Program have had great success assisting and partnering with marinas that are interested and able to apply best management practices for managing materials and wastes. We will build on these existing partnerships and leverage the direct interaction that marina staff have with boaters to enhance the awareness and understanding of NDZ requirements and minimize or eliminate vessel sewage discharges.

Marina Outreach and Trainings

We will conduct direct outreach visits to educate marina staff about the NDZ rule requirements, information or resources they could provide to boaters, among other topics.

Implementation Actions

- Coordinate and partner with Puget Sound marinas.
- Plan and conduct presentations for marina staff meetings on the NDZ and what it means for boaters.
- Participate in Clean Marina and EnviroStars technical assistance program onsite visits where necessary to talk about the NDZ program and resources available.
- Work closely with the Clean Marina Program, currently managed by Puget Soundkeeper Alliance) to distribute educational materials to marinas.
- Partner with Washington Sea Grant and present on the NDZ at their workshops or training events.
- Engage and work with the US Coast Guard Auxiliary, United States Power Squadron and other boating organizations to enhance the reach of NDZ information and resources.

Dye Tab Pilot Program

The Dye Tab Pilot Program (Pilot) is a voluntary education and outreach program that will encourage marina managers to use dye tabs to check for vessel sewage discharges. This program will also be conducted in partnership with the Clean Marina Program and the EnviroStars Certification Program.

We will work with marinas to implement a pilot program that encourages marinas to find ways to include dye tabs as part of their routine vessel inspections or through other periodic actions such as at lease initiation or renewal. The purpose of this is to verify that their tenant's boats are not discharging vessel sewage either purposely or inadvertently (e.g., leaks or breaks). Marinas will also be encouraged to include a requirement in tenant lease agreements.

Appendix B provides more details on how the pilot program would be implemented.

Implementation Actions

- Review pilot program implementation plan with key partners and update as necessary.
- Update the NDZ website with information about the pilot program.
- Develop and purchase program resources (brochure, training guides, dye tabs etc...)
- Recruit and train marinas on the program and how to talk about the program to boaters (e.g., as a supportive tool to check vessel function, as opposed to an enforcement mechanism).
- Distribute dye tabs and educational resources to marinas.
- Work with the Clean Marina Program and the Envirostars Program to include dye tab as one of the recommendations or requirements for program certification.
- Implement pilot program in accordance with Appendix B.
- Evaluate the effectiveness of the dye tab program as a tool for preventing vessel sewage discharges and educating boaters and encouraging NDZ compliance, and consider future steps.

Dockwalker Program and Trainings

The social marketing research shows that one of the most effective methods for providing information to boaters is word of mouth. We will plan and implement a Dockwalker program. Dock walkers are trained volunteers who inspire and educate boaters. They visit marinas, boat launch ramps, waterfront areas, boat shows and other events to educate and distribute boater kits with information and educational materials. Training of the volunteers will focus solely on how to educate and motivate boaters to engage in clean boating practices.

Implementation Actions

- Plan and develop the Dockwalker program implementation plan.
- Plan and create training resources and educational materials needed to implement the program.
- Update the NDZ website with a detailed description of the program and how people can be involved.
- Recruit and train volunteers.
- Advertise the program through social media, and other means.
- Implement the program, evaluate and make improvements.

Strategies for Commercial Vessel Operators

Commercial vessels (tug boats, commercial fishing vessels, small commercial passenger vessels, and NOAA research/survey vessels) have a delayed implementation date of May 10, 2023. Some of these vessels will require significant retrofits in order to comply with the NDZ rule. It is essential that we plan for outreach activities and coordinate with the target audiences in preparation for rollout on May 10, 2023.

Notifications and Presentations

We will conduct targeted informational sessions (e.g., webinars) with commercial vessel operators about the NDZ rule requirements and available resources in advance of 2023.

Implementation Actions

- Identify and segment the different target audiences within the commercial vessel delayed implementation group.
- Plan and develop educational and outreach materials (e.g., focus sheets, webpage updates, videos etc.).
- Identify and coordinate with key commercial vessel associations.
- Send periodic email notifications to the target audience.
- Plan and conduct stakeholder meetings and/or webinars.
- Present at appropriate stakeholder meetings or events.

Strategies for Mobile Pumpout Operators

Partnerships with Mobile Operators

Mobile pumpout operators interact with boaters and can be effective messengers for distributing NDZ information. We will work with these operators to hand out rewards to boaters that already use the mobile Pumpout services. Rewards will motivate these boaters and reinforce the behavior, making it socially desirable. Studies show that people are much more likely to adopt a new behavior if family, friends and/or their social groups practice it themselves or approve of it.

The goal is to encourage social diffusion of the behavior which will occur when boaters who are practicing the desired behavior motivate others to adopt the behaviors.

In addition, one common proven social marketing strategy for encouraging behavior change is the use of prompts. The rewards can also serve as prompts to encourage these boaters to continue to pump out.

Implementation Actions

- Identify and partner with mobile service operators.
- Identify outreach materials (i.e., the physical prompts/rewards) that mobile Pumpout operators would offer to their customers.
- Provide NDZ educational materials to operators for distribution to boaters.
- Evaluate make improvements as needed.

Strategies for Secondary Audiences

Secondary audiences are those people who can help reach and inform primary audiences and whose support can enhance the success of NDZ implementation.

Educate Employees who interact with Boaters

Employees who interact with boaters as part of their daily work should be prepared to answer basic questions about the NDZ rule and how to comply, and direct individuals to the NDZ website and Pumpout Nav app. It is therefore important to engage and educate these employees to ensure that they are familiar with the NDZ law and the available resources. Employees may be Federal, State, or local (city or county) agency employees, or marine supply store employees.

Implementation Actions

- Identify and engage employees who interact with boaters as part of their daily work.
- Create a one or two page focus sheet about the NDZ and available resources for partners to share with frontline employees in their organizations.
- Brief frontline employees about NDZ requirements and available resources and provide them with educational resources to share with boaters.
- Provide posters, signs, and/or brochures to City and County offices and other partner agencies, and marine supply stores.
- Prepare and send periodic emails to partner agencies reminding employees about the NDZ rule requirements, resources available, and potential outreach opportunities.

Key NDZ Messages

To be successful with the NDZ implementation, we have to reach our target audiences with vetted and consistent messages that resonate and motivates them to take action. It is imperative that all employees working on NDZ implementation, within Ecology and partner agencies speak with a unified voice providing relevant, accurate, and consistent information.

The following key messages will serve as the underpinnings of our communications. They can be customize and tailored to meet the needs of the target audiences.

- Puget Sound is a sensitive inland sea that has poor flushing. It is prone to bacteria and dissolved oxygen problems that affect shellfish resources and aquatic life.
- Marine sewage discharges threaten our food and our economy. People can get sick from eating shellfish that are polluted with bacteria from boaters' waste discharges.
- Unhealthy shellfish threaten both our recreational and commercial shellfish industries that contribute millions to our state's annual economy.
- Sewage discharges, even by a small number of vessels in small quantities can cause pollution that can be a problem of particular concern over or near shellfish beds.
- Vessel sewage is a source of pollution in Puget Sound and has contributed to the closure of fifteen percent of 245,000 acres of commercial and recreational shellfish beds.
- Every year millions of gallons of vessel sewage is diverted from Puget Sound when recreational boaters use pumpout stations.
- Recreational vessels in Puget Sound produce about 47.7 million gallons of concentrated sewage per year.
- More than 650 acres of commercial shellfish beds have been re-opened as a result of the Puget Sound No Discharge Zone
- When boaters release raw or partially-treated sewage from their vessels, high levels of disease-carrying pathogens and holding tank chemical additives enter Puget Sound.
- Report illegal vessel sewage discharges at:
 - nwroerts@ecy.wa.gov or 206-594-0000
 - swroerts@ecy.wa.gov or 360-407-6300

Implementation Partners

Partners have the ability and resources to influence key target audiences through their education and outreach efforts. Implementing this Strategy alongside our partners is fundamental to its success. The table below lists some of our current vessel sewage management partners. The list does not represent the full breadth of our partnerships.

Table 1 List of Ecology’s Current NDZ Implementation Partners

Partners	Focus Area	Resources
Washington Sea Grant	Pumpout Washington program, works with USCG auxiliary volunteers (spill kits), and participates in boat shows. http://pumpoutwashington.org/	Pumpout webpage and map. Pumpout operability support. Video on how to use adapters, messaging with adapter kits. Annual Boaters Survey.
US Coast Guard	http://www.uscgboating.org/	Boating safety mobile app
Washington State Parks	Boater education, pumpout station grants, volunteer program for waterfront.	Website, social media, Clean Vessel Act grants – RCO Washington water cruiser app: http://watercruiser.smartmine.com/#HomeScreen
Washington Department of Health	Monitoring in marinas and shellfish areas. Beach Program.	Shellfish program, BEACH program (in conjunction with Ecology)
Washington Department of Fish and Wildlife	Fishing, shell fishing enforcement program, whale enforcement (whale watchers), Works with State Parks.	Interactive website, role in signage, fishing regulation brochure – massive distribution, annual in-service training.
Department of Natural Resources	Manages state owned aquatic lands, aquaculture regulator	Signage, potential requirements in leases
County Health Departments	Water sample collection, issues local health advisories.	Some have small vessels.
Puget Sound keeper Alliance	Clean Marina Program, Dock Walker program, Outreach at boating events	Clean Boating Guide (every 2-3 years), Resource Manual for Pollution prevention. Attends boating events. List of marinas.

Partners	Focus Area	Resources
Futurewise	Shoreline property owners program, education program	Social marketing, surveys, articles, newsletters.
Puget Sound Partnership	Puget Sound Action Agenda	Education Communication and Outreach Networks. (ECONets)
Ports Associations		
Park Departments		
Department of Licensing	Vessel Registration	Mailings, website.
Shellfish industry		
Tribes- Northwest Indian Fisheries Commission		
Stormwater Outreach for Regional Municipalities (STORM) group	Education and outreach programs	Puget Sound Starts Here Campaign
Washington State Ferries		
NOAA		
Northwest Marine Trade Association	http://www.nmta.net/home.asp	Doing a clean green boat yard program?
Envirostar Clean Green Marina	http://www.envirostars.org/	
Marina Associations		Lease agreements
Orca Network		
Sea-Dock society		
Whale watchers/Clipper, ferries		
USCG Auxiliary Sector Puget Sound	Volunteer group-inspect commercial vessels	
Power Squandrons	Teach Boater education classes	Boater card education
Washington Ferries		Advertising
Surfrider Foundation		
Liveaboards Association and marina registration		Newsletters, email distribution lists.
Vessel Association		
Ports (Seattle, Tacoma)		
Marina Operators	Billings, Newsletters	
Marine Resource MRCs		
Pumpout Companies (for commercial and recreational vessels)		
Dock Captains		
Marine Boat builders		

Partners	Focus Area	Resources
Whale Museum		
Diver Groups		
Beach Watchers		
Friends of the Earth	Ask for support	Outreach to Washington Ports Association, Dock captain on Liveaboard, Liveaboard associations, Liveaboard registration office and West Marine Fisheries supply.
Tribal Shellfish Growers		

Enforcement Strategy

Active and extensive enforcement will not be the central strategy to successful implementation of a NDZ in Puget Sound; educating boaters on the best way to manage their vessel sewage will be effective for the majority of the boating community. However, the NDZ must be enforceable to be effective. The ability to prevent vessel sewage discharges includes having a means to deter violators with enforcement. A successful Enforcement Strategy requires following a clear and transparent violation notification process, coordination amongst agencies, delineating enforcement authority, clear messaging as to why vessel sewage prevention is necessary and consistent application of deterrence mechanisms.

The development and roll-out of the Enforcement Strategy over the next couple of years is timely given that additional groups of vessels will be required to comply with the rule beginning in May 2023.

The NDZ Enforcement Strategy is composed of three elements: the Enforcement Plan, support documents, and enforcement-related outreach and education.

The Enforcement plan outlines (1) the proposed reporting, documentation, and response process that Ecology and its partners would use in the event of an illegal vessel sewage discharge in the No Discharge Zone, and (2) proposed responsibilities for Ecology and each partner to ensure effective implementation of a comprehensive Enforcement Plan. We have already prepared a number of support documents to go with the Enforcement Plan, including Example County Ordinance Language related to vessel sewage management that Counties may take and adapt for their own purposes. We will also utilize a range of enforcement-focused education and outreach methods with our partners, leveraging the NDZ Enforcement Committee.

The Enforcement Plan is detailed in Appendix A.

Program Evaluation

Measuring the effectiveness of NDZ implementation will require a blend of different metrics and considerations – some qualitative, some quantitative – depending on the strategies and tools. We will work with our partners to develop an ongoing evaluation framework and establish a process to assess the overall program. We will plan and conduct a comprehensive process and outcome evaluation (all the related strategies and tools used to promote the program) to determine the effectiveness and efficiency of the program.

We will conduct surveys and interviews where possible as part of the different strategies with the target audience and our partners to evaluate the effectiveness of the strategies, educational toolkits as well as analyze web and Pumpout Nav App traffic. This will help us determine the program's overall reach, effectiveness in increasing awareness; shifting attitudes and bringing about behavior change.

The evaluation will seek to answer among others the following questions.

- Were the strategies identified in the plan implemented?
- Are key audiences more aware of NDZ requirements?
- Are boaters complying with the NDZ requirements?
- Are the target audiences getting the messages and taking action?
- Were the education and outreach tools and resources identified in this plan developed and broadly shared with partners and target audiences?
- Were the implementation partners successful in reaching the target audiences?
- Are boaters visiting the web sites? Does the web-based analytics indicate that many boaters are downloading the App?

Long-term measurement for the success of NDZ implementation would include evaluating the following:

- Is there an increase in vessel sewage pumped out?
- Have more shellfish beds moved out of the prohibited category?

To keep this implementation strategy alive, we will set a standing agenda at the NDZ Core Team meetings to assess plan implementation and identify opportunities for continuous improvements.

Implementation Actions

- Plan and determine evaluation targets and metrics to measure program progress and effectiveness. (Develop the program's logic model).
- Where possible, plan, coordinate and align evaluations with partner efforts to gain the greatest insights from the strategies.
- Design evaluation tools; gather data, analyze to track impacts and outcomes using evaluation guidelines.
- Develop an evaluation report with lessons learned that includes summaries of each of the different components of the Implementation Strategy.
- Review the evaluation recommendations and make changes.

Conclusion

It is important for boaters to have a clear understanding of what the NDZ rule requires, the reasons for the NDZ, what they can do to prevent sewage discharges, and know how to find pumpout facilities. This implementation strategy provides a clear plan for a coordinated education, outreach and enforcement program to achieve the NDZ goals in Puget Sound.

Appendix A. Enforcement Strategy



Puget Sound Vessel Sewage No Discharge Zone Enforcement Plan

Background

The Washington State Department of Ecology (Ecology) developed an Enforcement Plan to support effective implementation of the Puget Sound Vessel Sewage No Discharge Zone Rule (NDZ, see Chapter 173-228 Washington Administrative Code (WAC)). Ecology collaborated with key stakeholders to develop the Enforcement Plan which has a broad goal of supporting the elimination of vessel sewage discharges in Puget Sound (also known as blackwater discharges). Discussions with the NDZ Enforcement Committee partners confirmed that it is largely infeasible to engage in active enforcement with traveling vessels, with some exceptions (see USCG and WDFW responsibilities, below). As such, the enforcement of the NDZ will largely occur through interactions with operators of stationary vessels at ports, marinas, or when anchored or moored, along with a more formalized documentation process that allows for tracking of vessels that illegally discharge blackwater.

Active and extensive enforcement will not be the central strategy to successful implementation of a NDZ in Puget Sound; educating boaters on the best way to manage their vessel sewage will be effective for the majority of the boating community. However, the NDZ must be enforceable to be effective. The ability to prevent vessel sewage discharges includes having a means to deter violators with enforcement. A successful Enforcement Plan requires following a clear and transparent violation notification process, coordination amongst agencies, delineating enforcement authority, clear messaging as to why vessel sewage prevention is necessary and consistent application of deterrence mechanisms. Enforcement goes hand-in-hand with education and outreach, so there are some outreach items included in this strategy that focus on enforcement content. This document is structured into two distinct Sections: (1) the proposed reporting, documentation, and response process that Ecology and its partners would use in the event of an illegal vessel sewage discharge in the No Discharge Zone, and (2) proposed responsibilities for Ecology and each partner to ensure effective implementation of a comprehensive Enforcement Plan.

1. Process for Managing Reports of Vessel Sewage Discharges in the NDZ:

A. ERTS as the Reporting Tool:

Discharges of treated or untreated sewage that occur within the NDZ must be documented in Ecology's Environmental Report Tracking System (ERTS) through the Northwest Regional Office at 425-649-7000 or nwroerts@ecy.wa.gov. This is required for all vessels applicable under the NDZ rule.

Ecology expects all agencies (local, State, or Federal) that witness, or witness evidence of, an illegal sewage discharge in the NDZ to file an ERTS report, and also file an ERTS report when they receive information from community members about a sewage discharge.

- Ecology's ERTS Coordinators are trained to collect the following information:
- Vessel Owner and/or responsible party
- Vessel Name or minimum description of vessel (or marina slip number)
- Vessel Registration numbers, if known
- Estimate volume discharged
- Discharge location
- Discharge date/time
- Information given to the responsible party and by whom
- Evidence that suggested a blackwater discharge
- Other parties that have been notified or made aware of the discharge

Once the ERTS report is created, it is forwarded to Ecology's NDZ Compliance and Enforcement Lead (currently Evan Dobrowski) for follow-up. The initial follow-up actions typically involve contacting the party who made the ERTS report, or the potential or documented discharger (if known), verifying the information provided, and potentially engaging with more questions to gather a comprehensive understanding of the situation. Ecology will also communicate all discharges to the marina or Port that accommodates the vessel, if applicable, the local health authority and local law enforcement.

Ecology's NDZ Compliance and Enforcement Lead will also begin documenting information from the ERTS report and the follow-up investigations in an internal database (spreadsheet) in order to identify and track repeat offenders.

B. Three-Strike Policy Approach:

1. Ecology's enforcement of the NDZ Rule will follow a "three-strike" policy. That is, once an individual has been reported to discharge vessel sewage in the NDZ twice (which would involve two ERTS reports and two rounds of education and outreach), a third report of discharge would result in the issue of a penalty, with

progressively higher penalties if discharges continue. This approach would be standard unless the discharge is egregious and requires immediate action, as determined by Ecology's NDZ Compliance and Enforcement staff.

2. The three-strike policy for NDZ enforcement would be implemented as follows:
 - a. *First offense:* Ecology will notify the discharger that a violation of WAC 173-228 occurred (via email or phone, or other means available). Ecology or its partners will educate the discharger on the NDZ Rule and vessel sewage management, including information about NDZ boundaries and the location of Pumpout stations. At this stage, Ecology will update the ERTS record, noting when and how educational resources were provided. Each reported discharge will be added to the internal Ecology spreadsheet.
 - b. *Second offense:* Ecology or its partners will educate the discharger on the NDZ Rule and vessel sewage management, and Ecology will send a written warning letter notifying the discharger that a violation occurred. The Warning Letter will clearly state that if discharges from this vessel occur in the future, a penalty will be issued. Depending on the level of cooperation of the responsible party, and the amount of sewage discharged, Ecology may issue an Administrative Order requiring the documentation of sewage pumpout (e.g. receipts) at a defined frequency and over a specified period of time.
 - c. *Third offense:* Ecology considers a third reported discharge signifies that the discharger is showing strong disregard for the NDZ requirements and appropriate vessel sewage management. At this stage, Ecology will issue a notice of violation with penalty.
 - d. *Fourth offense:* At the fourth offense, Ecology will issue a notice of violation with a penalty and other means of enforcement such as issuing an Administrative Order requiring pump out documentation (e.g. receipts) to be submitted to Ecology for a specified period of time, or any of the enforcement provisions in Washington's water pollution control act or other federal provisions. Penalty amounts will increase as discharges continue.
3. The U.S. Coast Guard and any other state agency, if authorized, may use enforcement discretion to implement penalty actions prior to the third discharge event. The U.S. Coast Guard has its own authority and enforcement protocols, and we strive for a generally consistent approach.

C. Accompanying Education with Reporting:

1. During an interaction with a potential or documented discharger, all entities listed in this document should be able to provide education and outreach to the vessel operator/discharger regarding sewage management and the NDZ Rule. Ecology, or its partners, will provide materials, resources, and training opportunities to the entities so that accurate and consistent messaging is conveyed to boaters.

2. Enforcement Partner Responsibilities

This section provides a proposed list of the responsibilities and actions for the various partners who may be involved in vessel sewage discharge reporting, education/outreach, or enforcement of the NDZ. The suggested responsibilities have been developed based on information gathered through the NDZ Enforcement Committee meetings and other interactions.

A. Washington State Department of Ecology

Water Quality Program (includes NDZ Project Team) Should Work Toward:

1. Entering into a Memorandum of Understanding (MOU) with key agencies and other stakeholders which would define the responsibilities and actions to which each agency commits. Until MOU adoption, the strategy and information in this document are designed to create consistency of enforcement for NDZ regulations.
2. Collaborating with all agencies and stakeholders to help train and implement NDZ education, outreach, and enforcement. Ecology will be the primary source of guidance materials, including fact sheets, checklists, and other resources, for partners as it related to the requirements of the NDZ rule.
3. Developing a municipal code template for cities and counties to implement for marinas, with the intent of ensuring marinas understand NDZ requirements, install pumpouts, provide appropriate Pumpout signage, and potentially require participation in the Clean Marina program.
4. Developing sample language for marinas to include in their leases requiring boater's acknowledgement of NDZ rule requirements and Pumpout responsibilities, and the demonstrative use of dye tabs annually or upon the issuance of new leases. (Port of Friday Harbor and Port of Des Moines have strict rules and other Marinas could implement similar leasing rules.)
5. Tracking all blackwater discharge reports and discharger interactions that are reported to Ecology (via ERTS & spreadsheets).
6. Enforcing the NDZ during the reported third discharge by the same discharger.
7. Maintaining an MOU with Cruise ships, and updating the MOU as necessary in a manner that ensures compliance with the NDZ rule.
8. Collaborating with partners to seek inclusion of a dye tab usage requirement/best management practice (BMP) as part of the Clean Marina Certification and EnviroStars programs.
9. Legislative support for Revised Code of Washington (RCW) adoption to allow law enforcement agencies to enforce the NDZ. Working with law enforcement agencies such as WDFW, sheriff's department, and other law enforcement agencies is essential.
10. Communicating the enforcement process/checklist to boaters through existing partner webpages, including Ecology NDZ, Pumpout Washington, State Parks

- Clean Vessel Program and Mandatory Boater Education (Card) webpages, Washington State Recreation and Conservation Office, applicable County Health Departments and Recreation Programs, Sheriff Departments,. Washington Department of Licensing, Washington Department of Natural Resources, Ecology's Spill Prevention, Preparedness and Response Program (SPPR).
11. Pursuing active involvement in the Washington Alliance for Mandatory Boater Education (WAMBE) to ensure NDZ information is incorporated into recreational boating safety resources.
 12. Engaging with, and providing guidance to, the following enforcement agencies, with the goal of developing and fostering local enforcement authority.
 - a. King County Marine Unit
 - b. City of Seattle Harbor Patrol
 - c. King County Sheriff
 - d. Pierce County Sherriff's Department Marine Services Unit
 - e. WA Public Ports Association
 13. Pursuing the following enforcement-related outreach actions:
 - a. Developing and providing education and outreach materials for partners to distribute to boaters, marinas, in licensing offices, launch sites and other avenues.
 - b. Coordinating with Sheriff's Departments to join staff during Marina walkabouts to provide NDZ rule information (typically scheduled for July).
 - c. Developing and implementing a Marina Harbormaster NDZ training program.
 - d. Presenting NDZ rule information at the Annual State Boating Law Enforcement Conference in September.
 - e. Providing an annual training program to county staff & other Federal, State, and local government personnel regarding the NDZ and how to implement tracking and enforcement actions.
 - f. Ensuring links to partner's webpages are posted on Ecology's NDZ webpage.
 - g. Attending one SPPR Program (NWRO) meeting annually to update staff on the NDZ Rule, reporting, implementation, enforcement and messaging.
 - h. Communicating about the NDZ with Ecology's Northwest Region and Southwest Region ERTS Coordinators, annually. Information will be specific to the types of questions to ask and information to gather from those reporting potential vessel sewage dischargers, and who to contact after the ERTS report is created. Ecology's NDZ staff will also solicit feedback from ERTS Coordinators at this time regarding information sharing, protocols, and support materials that they might find useful.

Spill Prevention, Preparedness and Response (SPPR) Program Should Work Toward:

14. *After-hours Spill Responders*: Documenting notification of after-hour blackwater releases in the Spills Program Integrated Information System (SPIIS).
15. *Vessel inspectors (Prevention Section)*: Documenting observations of unlocked Y-valves made during inspections and reporting this information to Water Quality Program (NDZ Project team) for follow-up.
16. *Class 4 marina inspectors (Prevention Section)*: Providing NDZ education & outreach materials (developed/provided by the Water Quality Program) to marina operators, and sharing information about specific Class 4 marinas with Water Quality Program staff.
17. *All staff*: Becoming familiar with any NDZ education and outreach materials that the Water Quality Program provides to SPPR and share these materials with operators as needed during field work activities.

B. Partnering State Agencies

Washington State Department of Fish and Wildlife (WDFW) Should Work Toward:

1. Adding a Y-valve inspection to existing on-board inspection checklists, and requesting to see the Y-valve during each inspection
2. Documenting any vessel sewage discharges identified to Ecology via ERTS, including liveaboard vessels at marinas.
3. Providing education/outreach information to all vessel owners with a Y valve.
4. Providing education and outreach to all vessels, as well as enforcement if necessary, when interacting with vessels while underway or during on water inspections.

Washington State Department of Natural Resources (DNR) Should Work Toward:

1. Entering into an MOU with Ecology for complaint sharing to streamline the tracking of illegal discharges.
2. Entering into an MOU with Ecology requiring access to/installation of pumpouts in DNR leases.
3. Adding a No Discharge Zone signage requirement into DNR leases (e.g. at boat launches).
4. Requiring DNR shoreland/tideland leases to utilize dye tabs (colored yellow/green or orange) for all live-aboard vessels at a defined frequency (i.e. at lease activation and renewal), reporting all vessels that do not pass the dye-tab demonstration to Ecology via ERTS (i.e. dye is discharged), and providing education/outreach to all vessels.

Washington State Department of Health (DoH) Should Work Toward:

1. Entering into an MOU with County Health and water quality programs (that have vessels) for investigating sewage discharge complaints within waters inside their jurisdiction.

2. Documenting any vessel sewage discharges identified to Ecology via ERTS. Furthermore, the Department of Health should coordinate with Ecology and other pertinent entities on vessel discharges that affect shellfish areas.
3. Providing NDZ-related education/outreach information to vessel owners.
4. Periodically providing Ecology with updated information about the impact of sewage discharges on shellfish beds and/or human health.

Washington State Department of Licensing (DoL) Should Work Toward:

1. Including the requirement to acknowledge reading and understanding key NDZ requirements during the licensing process (e.g. add a checkbox on online and paper forms).
2. Posting NDZ information at all licensing offices (e.g. pin-up boards).
3. Including NDZ information with new boat licenses (provided by Ecology).
4. Including a correct link to Ecology's NDZ webpage on the DOL webpage (<https://www.dol.wa.gov/vehicleregistration/boatresources.html>)

Washington State Parks Department (State Parks) Should Work Toward:

1. Maintaining all State Parks-owned pumpouts.
2. (State Parks Clean Vessel Program) Continuing to update the database of Pumpout facilities and work to ensure pumpouts are operational and in compliance with funding requirements (such as maintenance-related grants).
3. Communicating all boater-submitted reports of malfunctioning pumpouts to applicable marinas.
4. Maintaining PumpoutWashington.org and link to Ecology's NDZ webpage.
5. Providing NDZ-related education/outreach materials to vessel owners as appropriate.
6. Adding NDZ rule information to the State Marine Law Enforcement Program.
7. Adding NDZ requirements to the Mandatory Boater Education curriculum in order to obtain a Boater Education Card. Alternatively, State Parks may add NDZ as a supplemental piece of training in the Boater Education curriculum.
8. Including Y-valve inspection as an item on the State Parks Inspection form that WDFW uses.
9. Coordinating with Ecology to jointly present clean boating and NDZ-related information at the Northwest Marine Trades Conference annually.
10. Requiring dye tabs (colored yellow/green or orange) as part of the state park-owned buoy moorage use.

Washington Sea Grant (program managed by the University of Washington) Should Work Toward:

1. Supporting the distribution of NDZ information at boating events to help educate the boating community.
2. Providing NDZ related education/outreach materials to vessel owners and marinas when possible.
3. Maintaining PumpoutWashington.org and link to Ecology's NDZ webpage.

4. Communicating Pumpout Nav reports of malfunctioning pumpouts to appropriate marinas.

C. Partnering Federal Agencies

United States Coast Guard (Coast Guard) Should Work Toward:

1. Confirming the operational status of Marine Sanitation Devices (MSDs) as appropriate during Coast Guard boarding. In the event the boarding is within the NDZ, Coast Guard should ensure y-valves are secured and locked.
2. Providing education and outreach on applicable Coast Guard requirements.
3. Using existing enforcement tools for the NDZ during vessel inspections.
4. Providing documentation to Ecology through ERTS when a vessel is found in violation of the NDZ rule.
5. Providing NDZ-related education and outreach to vessels, as well as enforcement if necessary, when interacting with vessels while underway or during on water inspections.

D. Partnering Local Agencies

County Health Departments Should Work Toward:

1. Documenting all vessel sewage discharges and reporting information to Ecology via ERTS.
2. Providing education/outreach information to any vessel found discharging blackwater.
3. Requesting inspections of Y-valve during interactions with vessels, and providing education/outreach on valve closure requirements.
4. Updating County regulatory codes to include NDZ-related needs (e.g. dye tab use, Y-valve inspections, or others) in marina development and operation requirements, utilizing a template provided by Ecology.
5. Collaborating with Ecology to adopt elements of NDZ enforcement in County codes, and enforcing the NDZ in accordance with item 1.B. of this Enforcement Plan.
6. (County Sheriff Departments) Enforcing the NDZ in accordance with item 1.B. of this Enforcement Plan.
7. Inspect marinas for adherence to Clean Marina and Envirostar certification programs.

E. Other Affiliated Partners

Clean Marina Program (managed by Puget Soundkeeper Alliance) Should Work Toward:

1. Updating the Program Manual to include information about reporting vessel sewage discharges to ERTS.

2. Requiring dye tab use (colored yellow/green or orange) as one of the requirements for certification.
3. Providing NDZ-related education/outreach information to marinas and vessel owners.
4. Updating the website to include NDZ information and a link to Ecology's NDZ webpage.

EnviroStars Program Should Work Toward:

1. Requiring dye tab use (colored yellow/green or orange) as one of the requirements for Program certification.
2. Providing NDZ-related education/outreach information to marinas and vessel owners.
3. Updating the website to include NDZ information and a link to Ecology's NDZ webpage.

Marina Owners/Operators Should Work Toward:

1. Documenting all vessel sewage discharges and reporting information to Ecology via ERTS.
2. Amending leasing rules to require all vessels to use dye tabs (colored yellow/green or orange) in blackwater tanks periodically.
 - a. Live-aboard and non-liveaboard vessels kept at marinas should demonstrate the use of dye tabs periodically, at a defined interval (for example, at lease initiation and annually thereafter).
 - b. Marinas should provide short-term visiting vessels with a dye tab to use during their time within the marina.
 - c. Marinas may use a phased approach, whereby year 1 would include dye tab demonstrations and Y-valve checks for all new leases and voluntarily for existing leases, while year 2 would transition to dye tab demonstrations and Y-valve checks being a standard annual requirement. (Refer to requirements of Port of Friday Harbor and Port of Des Moines.)
3. Seeking Clean Marina and EnviroStar program certifications.
4. Installing and maintaining pumpouts and making them available to all recreational vessels including short-term visitors. If the marina is unable to provide a working Pumpout they should provide information on available mobile Pumpout services.
5. Providing signage, instructions for use, and information about how to report pumpout equipment malfunctions.
6. Reporting non-functioning pumpouts to WA State Parks Clean Vessel Act Program for integration into the Pumpout app.
7. Cleaning up trash and debris in waterways (including what has sunk to the sediment) on a regular basis.
8. Participating in training programs developed for the NDZ, such as Ecology's Harbormaster training program (to be developed).

Contacts

Evan Dobrowski

No Discharge Zone Compliance and Enforcement Lead

evan.dobrowski@ecy.wa.gov

425-213-4230

Jessica Huybregts

No Discharge Zone Project Coordinator

jessica.huybregts@ecy.wa.gov

425-941-8633

Appendix B. Dye Tab Pilot Program



Dye Tab Pilot Program A Voluntary Education Program

By
Justine Asohmbom

Washington State Department of Ecology
Northwest Regional Office
Bellevue, Washington



Dye Tab Pilot Program

A Voluntary Education and Outreach Program

Water Quality Program

Washington State Department of Ecology
Northwest Regional Office
Bellevue WA



Table of Contents

<u>Acknowledgements</u>	55
<u>Introduction</u>	56
<u>Pilot Program Description</u>	56
<u>Partnership with Clean Marina and EnviroStars Programs</u>	57
<u>Pilot Program Goals</u>	57
<u>Target Audience</u>	57
<u>Pilot Scope</u>	58
<u>Pilot Implementation</u>	58
<u>Pilot Preparation</u>	58
<u>Marina Agreement and Registration Form</u>	60
<u>Pilot Testing</u>	62
<u>Pilot Evaluation</u>	63
<u>Pilot Activities and Schedule</u>	64
<u>Potential Pilot Program Participants</u>	66
<u>Conclusion</u>	67

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Special thanks also to the marina managers who participated in our listening sessions and shared their established practices for preventing sewage discharges from vessels inside their marinas.

No Discharge Zone Education and Outreach Core Team

- Blair Englebrecht, Puget Sound keeper Alliance
- Aaron Barnett, Washington Sea Grant
- Bridget M. Trosin, Washington Sea Grant
- Maryann Wagner, Washington Sea Grant
- Catherine Buchalski-Smith, Washington State Parks
- Amy Jankowiak, Washington Department of Ecology
- Evan Dobrowski, Washington Department of Ecology
- Jessica Huybregts, Washington Department of Ecology
- Justine Asohmbom, Washington Department of Ecology

Introduction

Puget Sound has been designated a No Discharge Zone (NDZ) for vessel sewage. It is illegal to discharge treated or untreated sewage (blackwater) from any vessel into Puget Sound. The NDZ rule ([WAC 173-228](#)) became effective on May 10, 2018.

Effective implementation of the NDZ rule requires partnering and coordinating with marinas in our outreach efforts. Marina staff are directly engaged with recreational boaters who use their facilities on a long and short term basis, and have the ability to define vessel operational protocols as part of their lease agreements.

We want to leverage the direct interaction that marina managers and their staff have with boaters to remind them of the NDZ requirements; and motivate them to adopt best management practices for vessel sewage.

As part of the process, we held several listening sessions with marina managers in 2020 to understand their established practices for preventing sewage discharges from vessels inside marinas and discuss the feasibility of using dye tabs during routine vessel inspections.

The managers provided valuable information about marina management processes, business practices and how a dye tab program could be implemented in their marinas. The information gathered from these listening sessions helped guide the framework for this dye tab pilot program.

This plan describes the concept for the dye tab pilot program, the scope of the pilot, key approach and implementation actions, potential participants and an implementation schedule.

Pilot Program Description

The Dye Tab Pilot Program (Pilot) is a voluntary education and outreach program that will encourage marina managers to use dye tabs to check for vessel sewage discharges. This program will also be conducted in partnership with the Clean Marina program and the EnviroStars program.

Marina managers would use dye tabs to check for vessel discharges during routine vessel inspections that occur upon lease initiation or renewal, or at other times determined by marinas. Ecology will provide complimentary dye tabs and educational resources to participating marinas. The participating marinas will add language in tenants lease agreements stating that everyone who uses a mooring will have dye tablets placed in their holding tank during their stay.

Given that this is an educational program, sewage discharges detected under this program will not result in a citation within the marina; however, the marina staff will educate the boater about proper sewage storage and disposal, and zip tie valves or close in another way to prevent any sewage discharges from the vessel.

The emphasis of the educational component would be on communicating best management practices and the NDZ rule requirements with tenants, whether they be short- or long-term guests of the marina. But if a vessel has a dye tab in the tank and discharges outside of the marina within the No Discharge Zone, it could result in a citation.

We hope to use this program as a deterrent to accidental and deliberate discharges of sewage in the No Discharge Zone. The visual observation of a dye in the surface water body will help boat owners determine whether their marine sanitation devices (MSD) is sealed and functioning properly. Also knowing that marina staff may administer dye tablets will encourage boat owners to properly maintain their holding tank systems and keep y-valves closed and locked. The dye tabs will serve as prompts to remind them about the rule.

Partnership with Clean Marina and EnviroStars Programs

The Clean Marina and the EnviroStars Programs have had great success partnering with marinas as part of their technical assistance and certification programs. We want to build on these existing partnerships and enlist marina assistance in educating their tenants about the NDZ and preventing sewage discharges.

The Clean Marina and EnviroStars programs, as partners in the Pilot, will add a requirement in their marina certification applications encouraging marinas to voluntarily use dye tabs during vessel inspections.

Pilot Program Goals

The main goals of the Pilot are to:

- Test how dye tabs can be used during vessel inspections conducted by marinas, with the overall objective of reducing sewage leaks or releases in the NDZ.
- Identify successful program components to develop a scalable program.
- Leverage the Clean Marina and EnviroStars Programs to broaden efforts to address vessel sewage discharges.
- Remind boaters about the NDZ rule and motivate them to prevent vessel sewage discharges in the NDZ.

Target Audience

This Pilot Program will focus on recreational vessel tenants at marinas, including those with seasonal or full-time moorage, as well as live aboard vessel residents, and short-term guests.

Pilot Scope

We would recruit at least twenty participating Puget Sound marinas of various sizes to explore the feasibility of marinas using dye tabs during vessel inspections to check for vessel sewage discharges. The pilot would be operational for one year.

The voluntary Pilot Program would be managed and supported by Ecology's NDZ Team. Ecology's Pilot Program Coordinator would work closely with the NDZ Team, marina managers, and the Clean Marina and EnviroStars program coordinators.

Based on the lessons learned after one year, we would determine whether there is need for and/or value in a large-scale implementation and, if so, how it should be implemented at that scale.

Pilot Implementation

The Pilot Program will be implemented in three phases – *Pilot Preparation*, *Pilot Testing* and *Pilot Evaluation*. Each phase has specific implementation actions. It is important to note that while the phases and activities may suggest a linear sequence, in actual implementation there is often a more dynamic flow to the work.

Pilot Preparation

During this phase, the NDZ Team will plan for and develop all the necessary resources needed to implement the program. We will also contact, recruit and train marinas to participate in the program. It is important to note that a key recruiting challenge is that some marinas might think the dye tab program is for enforcement purposes. We will craft messaging in all communications materials to address and alleviate this potential barrier. Some of the resources that will be developed include, but are not limited to:

- Recruitment letter/invitation
- Participating marina agreement and registration form
- Educational NDZ materials (signage, brochures, posters, informational webinar etc.)
- Implementation guide and data collection forms
- Frequently Asked Questions (FAQ) that explains what is expected of participating marinas and Ecology's role.
- Signs with information about the program

Implementation Actions

- Plan and develop implementation resources (see list above)
- Identify evaluation measures and appropriate tools to collect data and evaluate the pilot
- Present at marina meetings to introduce the Pilot Program and recruit marinas (or identify interested marinas for further communication)
- Develop and/or purchase program resources such as dye tabs etc.
- Work with Clean Marina Program and the EnviroStars Program to include dye tab as one of the requirements in their certification program
- Update the Ecology's NDZ website with information about the Pilot Program
- Advertise the program, including leveraging our existing inter-agency partnerships
- Complete the recruitment process (e.g., forms/agreements) and train marinas
- Distribute dye tabs, zip ties and educational resources to marinas.

Marina Agreement and Registration Form

Dye Tab Pilot Program: June 2021 - June 2022

- Yes! Our marina will participate in the Dye Tab Pilot Program.
- Yes! We agree to include information about the use of dye tabs during inspections in our tenant lease agreements.
- Yes! We agree to include information about the program in at least one tenant communication channel (i.e. website, social media, newsletter, outreach materials) during the Pilot timeframe.

Description of outreach channels to be used:

- Yes! We agree to educate our staff to ensure they are knowledgeable about the program and the NDZ.
- Yes! We agree to prominently display *the Dye Tab Pilot Program* signage provided by the Program at our marina for the duration of the pilot.
- Yes! We agree to document and keep track of the number of boats inspected with dye tabs, as well as the number of sewage discharges identified during the Pilot timeframe.
- Yes! We agree to educate tenants about the NDZ and provide educational resources about the Program.

My marina routinely inspects boats: (Check all that apply)

- On lease initiation
- Annually
- Every six months
- When there is a problem
- Other _____

My marina is a member of: (Check all that apply)

- Clean Marina
- EnviroStars
- Other _____

My marina has: (Check all that apply)

- Guest slips
- Full-time/seasonal slips
- liveboards
- Other _____

Marina
name _____

Marina
address _____

Mailing
address _____

Phone () _____

E-mail
address _____

Contact Name _____ Title _____

Signature _____

Date _____

Join the Dye Tab Pilot Program

The Washington Department of Ecology invites Puget Sound marinas to join the Dye Tab Pilot Program – A voluntary education program that encourages marinas to use dye tabs to check for sewage discharges during vessel inspections.

The Dye Tab Pilot Program focuses on educating boat owners about best management practices for sewage discharges and the NDZ rule. It also provides the boat owner with information about their marine sanitation devices by identifying potential problems caused by leaks or incorrect use. Ecology will provide complimentary dye tabs and all the necessary outreach materials. All Puget Sound marinas are eligible to take part in this new educational program.

Your role as a participating marina

Participating marinas will use complimentary dye tabs provided by Ecology to check for vessel sewage discharges during routine inspections of boats mooring at their marinas.

Benefits to participating

- A chance to show your tenants that you are a clean marina who cares about water quality
- Complimentary dye tablets and zip ties
- Free promotional signage for display at your marina

What will participating marinas need to do?

- Complete the registration form to indicate your interest in participating
- Display Dye Tab signage in your marina.
- Review training materials to educate you about the program, your role, and what the program entails and ensure that all staff is aware of the program and basic NDZ rule information.
- Use dye tabs when inspecting vessels moored at your marina and educate the boat owner about the importance of preventing sewage discharges in the NDZ. Ask the boat owner to flush their onboard toilet and check the water surrounding the vessel for dye.
- Add language in tenants lease agreements stating that everyone who leases a slip/mooring will have dye tablets placed in their holding tank during their stay.
- Document the total number of boats inspected with dye tabs and the number of sewage discharges identified, if any.

How do I sign up?

Fill out the marina registration form [We will provide the link to the online form and paper version where necessary]

Pilot Testing

This phase is the actual implementation of the Pilot where marina managers will use the dye tabs provided to inspect vessels. Marina managers participating in the program will inform vessel owners mooring at their marinas about the dye tab program and what it entails before inspection.

Implementation Actions

- Marina managers will notify tenants about the pilot.
- Add dye tabs to onboard toilets during routine inspections and check the discharge port.
- Educate the boat owner about the need to close and secure/lock the Y-valve, and if there is a sewage discharge zip-tie the valve or close it in another way. .
- Fill out data collection form.
- NDZ Pilot Coordinator will follow up with marina managers and document the steps taken to achieve results. This will help determine what needs to be done to implement the Program on a larger scale. Data on the implementation process that will be collected include:

- Information regarding required resources needed to implement the program
- Challenges and successes with Pilot Preparation and Testing processes.
- Boater’s attitude towards the program
- NDZ Pilot Coordinator will conduct mini-surveys and interviews with boaters and marina managers throughout Program implementation.

Pilot Evaluation

We will develop methods for collecting and analyzing information to evaluate the effectiveness of the pilot. Data will be generated primarily through surveys and interviews of Pilot participants, boat owners as well as marinas who choose not to participate in the pilot.

The NDZ team will analyze survey data to determine the effectiveness of the Pilot Program and make recommendations.

Implementation Actions

- Plan and identify evaluation measures and appropriate tools to evaluate the pilot.
- Design evaluation; gather and analyze data
- Write an evaluation report with lessons learned and recommendations
- Plan and disseminate lessons learned
- Based on the results of the Pilot, develop a detailed implementation strategy for an expanded program, if applicable (that is if Program continuation/expansion is recommended)

A tentative project schedule for all phases and activities is provided below. It is important to note that the NDZ Team will meet to discuss and flesh out the details of each specific task including hours/weeks, roles and responsibilities and update this table with the detailed information.

Pilot Activities and Schedule

Phase	Actions	Who	Timeline
Pilot Preparation	Plan and develop implementation resources	NDZ Team	June – Sept. 2021
	Plan and identify evaluation measures and appropriate tools to evaluate the pilot	NDZ Team	
	Present at marina meetings to introduce Pilot Program and recruit marinas	Members of NDZ Team/Pilot Coordinator	
	Work with Clean Marina Program and EnviroStars to include dye tab as one of the requirements in their certification program	Pilot Coordinator	
	Update NDZ website with information about the Pilot	NDZ Team	
	Advertise the program	NDZ Team and key partners	
	Create a list of potential marina to recruit	NDZ Team working with key partners	
	Contact, recruit and train marinas	Pilot Coordinator working with NDZ Team	
	Distribute dye tabs, zip ties and educational resources to marinas	Pilot Coordinator	
Pilot Testing	<ul style="list-style-type: none"> Marina managers notify tenants about the pilot 	Marina staff	Sept. 2021 – Sept. 2022
	<ul style="list-style-type: none"> Inspect vessels with dye tabs and check discharge port 	Marina managers	

	<ul style="list-style-type: none"> Educate the boater and zip tie the valves if there is a sewage discharge 	Marina staff	
	<ul style="list-style-type: none"> Fill out data collection form 	Marina staff	
	<ul style="list-style-type: none"> NDZ Pilot Coordinator will follow up with marina managers and document the steps taken to achieve results 	Pilot Coordinator	
	NDZ Pilot Coordinator will conduct mini-surveys and interviews with boaters and marina managers during Pilot implementation	Pilot Coordinator	
	Ongoing support – Tracking and follow-up with participants	NDZ Team	
Pilot Evaluation	Plan and identify appropriate evaluation measures and tools	NDZ Team	
	Design evaluation; gather and analyze data	Pilot Coordinator working with NDZ Team	Sept. – Dec. 2022
	Write an evaluation report with lessons learned and recommendations	Pilot Coordinator working with NDZ Team	
	Plan and disseminate lessons learned	NDZ Team	
	Based on the results of the Pilot, develop a detailed implementation strategy for an expanded program, if applicable	Pilot Coordinator working with NDZ Team	

Potential Pilot Program Participants

This list represents some potential marinas to recruit to participate in the program.

Marina	Name of contact	Email	Phone Number	Number of Slips
Port of Friday Harbor	Tami Hayes	tamih@portfridayharbor.org		
City of Des Moines Marina	Scott Wilkins	swilkins@desmoineswa.gov		
Gig Harbor Marina	Jeff Broders	jeff@gigharbormarina.com		
Foss Harbor Marina	Tarin Todd	tarin@fossharbor.com		
Port of Poulsbo Marina	Melanie Winett	poulsboharbormaster@portofpoulsbo.com		
Swantown Marina	TJ Quandt	tjq@portofolympia.com		
Olympia Yacht Club	John Sherman	sv_grendel@hotmail.com		
Elliot Bay Marina	Dwight Jones	whitey@elliottbaymarina.net		
Cap Sante Boat Haven, Port of Anacortes			360-293-0694	

Marina	Name of contact	Email	Phone Number	Number of Slips
Bremerton Marina, Port of Bremerton				
Oak Harbor Marina			360-679-2628	

Conclusion

This Dye Tab Pilot Program is one part in our ongoing efforts to implement a comprehensive education and outreach program for the NDZ. It lays the groundwork to determine if it is feasible to implement such a program on a larger scale. Overall, this work is aimed at eliminating sewage discharges in Puget Sound to improve water quality.

Appendix C. Recreational Boaters Survey Results



Marketing Insights and Recommendations

Based on Research with Stakeholders and Recreational Boaters

Project Overview

- Great Lakes Marketing, in partnership with Talitha Consults, conducted three studies to understand awareness, sentiments, and behaviors associated with the NDZ. The insights gathered from stakeholders and recreational boaters were used to develop templates for an educational campaign. This report includes all relevant information from the three studies and recommendations based on all phases of research conducted. The full, individual reports have been provided to the Department of Ecology (Ecology).
- Phone interviews were completed with nine stakeholders who represent different recreational boater constituency groups. Two quantitative studies were completed with recreational boaters across the state (with samples of 4,195 and 1,733).
- Data Collection: March 2020 – October 2020

Stakeholder Research Conclusions & Opportunities

- Ecology is expected to continue to lead the NDZ educational messaging.
- Several organizations are interested in partnering with Ecology to help educate boaters about how, **and why**, to comply with the NDZ.
- The target audiences extend beyond those who live in Washington (and the US), so efforts must be made to reach people at their point of use (i.e., when they charter a boat, launch a boat, cross a border, etc.).
- Because each potential partner organization has its own way to communicate with its constituencies, Ecology will need to have a variety of platforms for educational messaging (i.e., social media posts, website content, diverse forms of publicity materials in both print and digital, etc.).
- The messaging and materials need to be provided in formats compatible for easy replication by partner organizations. This will help sustain and harmonize the campaign.
- Boaters are, by definition, participating in a recreational activity (enjoying their time on the water, relaxing, etc.). Messaging needs to acknowledge their positive impact, help them follow the rules (since they want to be good stewards of the water), and reflect a lighter tone.
- Although the focus of this research is on messaging, education is only a part of the compliance equation. It is important that pumpout stations are plentiful, conveniently located, fully functioning, and easy-to-use.

Recreational Boater Survey #1 – Summary of Key Findings

- Survey participants are often on the Puget Sound and use both marinas and other access points.
 - 67% have been on Puget Sound within the past couple of years
 - 59% keep their boat at a marina and 50% trailer their boat (and some could do both)
 - 62% spend at least 21 days a year on their boat
- Type of Marine Sanitation Device:
 - 53% have a holding tank
 - **25% have no onboard collection**
 - 18% have a porta-potty
 - 5% have a composting toilet, Type I or II
- Awareness of the NDZ among key audiences is high:
 - Overall, 64% of those surveyed have heard of the NDZ
 - 79% who have been on Puget Sound recently are aware of the NDZ
 - 88% that keep their boat at a marina are aware of the NDZ
 - 94% that have a holding tank are aware of the NDZ
- The groups with the lowest awareness level of the NDZ are less likely to be on the Sound or have a sanitation device.
 - 36% of recreational boaters that have **not been** on Puget Sound recently are aware of the NDZ
 - 38% that do not have a marine sanitation device are aware of the NDZ
 - 54% that trailer their boat to the water are aware of the NDZ
- Recreational boaters say that the best methods to inform them about the NDZ are:
 - 61% through word-of-mouth
 - 53% through marinas
 - 49% through boating publications
 - Waggoner Guide and Northwest Yachting are the most popular, each with about 42% readership among recreational boaters
 - 37% through state agencies
- Sentiment toward NDZ indicates that reminders are needed, but so are working and accessible pumpout stations.
 - 64% agree that boaters need to be reminded about NDZ regulations
 - 60% agree that the NDZ helps solve water quality problems
 - 86% with a marine sanitation device on board have heard about the NDZ but would like tools and reminders to make it easier to comply
 - Only 22% agree that enough pumpout stations are functioning correctly and available for use
- Boaters want the following types of information about the NDZ to be shared:
 - 52% want to know the location of pumpout stations and real-time data about status, preferably on a smartphone app
 - 42% want to know the exact boundaries of the Puget Sound NDZ

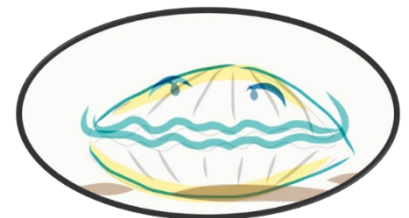


Recreational Boater Survey #1 – Conclusions and Thoughts

- Achieving compliance with the Puget Sound NDZ is both an operational issue and a marketing issue:
 - Messaging needs to focus on both the punishment and the gain (i.e., consequences of illegal discharging and the value of appropriate behavior).
 - Compliance can be enhanced by messaging that **creates a desire** to make an effort to follow the NDZ guidelines.
 - Different communication channels are needed to reach the many user groups.
 - Signs at marinas and other point-of-use locations should serve as reminders for boaters to integrate a stop at a pumpout station into the plans. (Locations should include relevant retailers, launch sites, etc.)
- For recreational boaters to comply, enough operating pumpout stations must exist in locations that are accessible and convenient to use:
 - Access to real-time information will help recreational boaters integrate the use of pumpout stations into their boating excursion

Recreational Boater Survey #2 – Summary of Key Findings

- From the first survey in the Spring to the second survey in the Fall, awareness of the NDZ increased 17 percentage points.
- Most users of pumpout stations do not know of any unusable stations.
- Half of the respondents use the Washington State Parks website to get boating regulation information.
 - 14% said they followed The Department of Ecology on their social media platforms
- About one-third have heard of the new Pumpout App and 12% currently have it downloaded.
 - 35% have not heard of the app but plan to look into it
- Boaters are most likely to rally behind the slogan "Pump It, Don't Dump It" or "Pump, Don't Dump."
- 37% of the boaters selected Carla the Clam as the best graphic (spokesperson) to tell the story of why the NDZ is important to water quality.
 - Patty Poo is recognized but does not link the behavior of pumping out to the positive outcomes
- Boaters are most likely to use floating key chains, tide charts, oil absorbent pads, and sanitizing products with the NDZ mascot on them.
- The majority of boaters believe signage at the docks/launch sites is the best way to spread NDZ compliance messages.
 - They also believe social media and websites are viable communication tools



Carla the Clam
1

Recommendations Overview

- This is a behavior change campaign—not a campaign to build awareness. Most boaters know about the NDZ. The goal is to change behavior because ***it is the right thing to do*** (to be good stewards) and ***it is the law*** (a punishable offense).
- Strong branding for the No Discharge Zone (with a subtitle that states the NDZ is administered by the Department of Ecology) is needed.
 - Recommended Tagline: Pump it, Don't Dump it! It's the Law.
 - Pump Out materials need to focus on stewarding the water and marine life, with information about how to comply with the law to avoid penalties
- The message must be shared through a coordinated multimedia campaign (print, videos, posters, rack cards, magazine ads):
 - Ecology must leverage existing platforms
 - Public educational material should be multilingual and explain the connection between pumping out waste and the law.
 - Use pumpout stations to remind boaters of the state law (enforceable by fines up to \$10,000)
 - More signage **with the NDZ map** is needed at marinas, launch sites, and fishing stores--paired with the PumpOut Nav app information
 - Information should include the QR code, app icon, and downloading instructions – publicize that the app is free



Recommendations

Recommendation #1: Conduct a Coordinated, Multi-Channel Campaign

- Recreational boaters fall into two main segments:
 - Those who keep their boat at a marina/yacht club
 - Those who typically trailer their boat to water
- Since communication channels are different for each sector, a combination of the following is needed:
 - Social media
 - Website (with videos and relevant content)
 - Signage
 - App
 - Branded swag
 - Magazine ads
- For harmonization, the campaign is to include the slogan and spokesperson.



- Carla, and her friends, Oly and Shelly can share the message. Just like Smokey the Bear says, "take care of my home—it is your responsibility," Carla and the gang remind boaters to be **Good Stewards of the Sound**.
- Patty Poo
 - Patty is a good reminder of the NDZ; however, she does not address the motivation to do the right thing and *Pump it, Don't Dump It*
 - Videos are needed to support messaging

Recommendation #2: Pump it, Don't Dump It

- The graphic shows the progress to success.
- To address both motivations to comply, the full phrase is:
 - Pump it, don't dump it. It's the law.



Recommendation #3: Improve the Website

- Multiple websites are used but are not optimized or integrated.
 - The terminology varies between sites
 - Access to relevant information is hidden behind several clicks
 - As Ecology takes the predominant role in educating the public, the website will get increased traffic and must be a valuable, easy-to-use tool

Recommendation #4: Promote and Enhance the Pump Out Nav App

- The app has the potential to be a valuable tool – and it is free. It needs to always be accurate and heavily promoted.
- About 70% are either using the app already or plan to use the app.
- Users want the app to include:
 - Locations of stations
 - Status /cost of stations
 - Location of mobile pumpout service, NDZ boundary map, and Washington boating laws



Recommendation #5: Use Place-Based

- Boaters get information from many sources.
 - Social media, publications, etc., can continuously provide reasons to be good stewards.
 - Place-based signage (at launch sites, marinas, etc.) need to enforce the message that: It is the law. When the message is well placed, it says: *think now about how you plan to comply*.
 - Two strategies are needed for place-based signage: utilize existing structures and create new, eye-catching boards.

Recommendation #6: Use a Variety of Programs, Tailored to the Audience

- Marina managers are interested in, and are open to, a program that-uses dye tabs to check for vessel sewage discharges. It is important to listen to the intended audience before you develop such a program.