

LEE ROUSSEL

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TACOMA, WA 98407
Nov. . 30, 2017

Re: Puget Sound No Discharge Zone

This is a formal comment with regard to the Puget Sound No Discharge Zone.

I have been involved in Puget Sound clean water issues for more than 15 years. I was a member of the Washington Oil Spill Advisory Counsel and its successor, the Puget Sound Partnership spills working group. I provided input on amendments to the state's derelict vessel program. I was a member of the Department of Ecology's Oil Spill Contingency Plan WAC 173-182 Rule Advisory Working Group. And I was a member of the board of directors and an officer (vice president, president and secretary) of Tacoma's Citizens for a Healthy Bay.

I am a recreational boater with a 32 foot sail boat and experience sailing the South Sound areas discussed herein, especially the popular boating area bounded by the Tacoma Narrows, Nisqually Reach and Devils Head.

Currently, there are not adequate pumpouts in the South Sound. For example, there is no pumpout at all useable by boats over 30 feet, or not shoal draft, in the area between Tacoma and Nisqually Reach/ Devils Head. Zero is simply not adequate. A no discharge zone should not be considered until adequate pumpouts are installed and operating reliably.

A. Inadequate Pumpouts

Puget Sound is a very large boating area, so what matters is not overall number of pumpouts, but access in specific geographic areas where boaters congregate.

Many recreational boats congregate in the South Sound area between Tacoma, Devils Head and the Nisqually Reach, especially during summer.. While some come for only a few days, others make a passage from one destination to another, such as Penrose to Filucy to Tolmie to Oro Bay, spending time at each... Other boaters will continue south to Boston Harbor or Olympia. In any case, their boats need to pump out.

This area runs about 16 miles South/ Southwest from the Narrows to Devil's Head via Nisqually Reach and about 12 miles from Tolvia Shoal North/ Northwest up Carr Inlet. It includes the popular cruising destinations of Penrose Point, Cutts Island, Filucy Bay, Oro Bay, and Tolmie State Park, with populated and less popular anchorages in Horsehead Bay and Wollochet Bay.

South Sound pumpouts are shown at. <http://parks.state.wa.us/724/Central-Southern-Puget-Sound>. There is only one, Penrose Point, between Tacoma and Devils Head/ Nisqually Reach and only three, Penrose, Zittels and Jarrell Cove, in the entire area between Tacoma and Olympia.

The Penrose Point pumpout in on the state park float in Lakebay, Mayo Cove's inner harbor. <http://parks.state.wa.us/803/Penrose-Point-State-Park>. Use is limited to boats 30 ft or less. The park float is in shallow water. According to Scherer, A Cruising Guide to Puget Sound, page 54, "[t]he

approach to Mayo Cove's inner harbor snakes between two sandspits and is advised only for shallow-draft boats." As a result, there is simply no pumpout at all in the popular cruising area between Tacoma and Devils Head/ Nisqually Reach useable by boats that are not both shoal draft and under 30 feet. Other boats needing to pump out simply have no place to go.

Of the three pumpouts between Tacoma and Olympia, two, Penrose Point and Zittels, are limited to shallow draft vessels. Penrose is discussed above. Zittel's, on the mainland below Case Inlet just east of Johnson Point reports low water depth of 8 feet, <http://parks.state.wa.us/821/Zittels-Marina>, in an area where minus tides are common. According to Scherer, A Cruising Guide to Puget Sound, page 64, "[t]he entrance is shallow and narrow..." Bailey and Nyberg, Gunkholing in South Puget Sound, page 243, report going aground 25 feet from its docks.

Jarrell Cove, at the top of Hartstene Island on Pickering Passage (west of Case Inlet). appears to have two pumpouts, at least one of which may be in deep water. However, it is a long distance up Case Inlet and many sailboats cannot use Pickering Passage to continue on to Olympia due to a fixed bridge. For them, Case Inlet is a dead end, with Jarrell Cove at its end.

Before declaring a no discharge zone, adequate pumpouts must be installed. For the South Sound, that would mean new pumpouts at Oro Bay (Anderson Island), Filucy Bay (Key Peninsular) and a new deep draft dock pumpout at either Penrose Point State Park or Kopachuck State Park.

An additional deep draft pumpout is needed between Devils Head and Olympia. Joemma State Park would be suitable if a year round float were installed and protected from strong winds. (Currently, the float at the end of Joemma's dock is removed each fall).

The South Sound has seen an increase in the number of recreational boaters in recent years – a trend that will likely continue. Installing an adequate number of pumpouts distributed equitably around the region is imperative before declaring a NDZ.

2. Pumpout reliability

Installing and maintaining adequate pumpouts in the South Sound is complicated by the lack of sewer systems. While urban pumpouts discharge into sewer systems, the South Sound's islands and most of the Key Peninsular use septic systems. Indeed, malfunctioning septic systems are one of the South Sound's water quality threats.

Connecting a pumpout to a septic system or more likely a septic storage vault creates capacity issues not present with sewer systems. A storage vault has finite capacity. Overloading a septic system can result in leakage into ground water and Puget Sound. When capacity is reached, the pumpout may be shut down.

There have been reports of pump line problems at the existing Penrose Point pumpout. Pumping waste uphill from a dock to a septic system or a vault on higher ground can be challenging.. Pump line problems could also be a risk at other sites. During such problems, the pumpout may need to be shut down.

While in urban areas a closed pumpout commonly means only a few minutes motoring to the next marina, that would not be the case in the South Sound if only the minimum required were installed. Distance and adverse currents could require hours of travel to reach a working pumpout, particularly for a sailboat with an auxiliary engine.

As a practical matter, a closed pumpout can transform a no discharge zone into a must discharge

zone. Biology does not stop when pumpouts close. Concerns about pumpout capacity and reliability, therefor, should be resolved before a NDZ is implemented.

It appears that on-board treatment technology for recreational boats has developed significantly over the past two decades. Boat US Magazine, Boat Waste-Treatment - Technology: Developments in onboard waste-treatment technology have created a more effective MSD., published: April/May, 2012, <http://www.boatus.com/magazine/2012/april/taking-care-of-business.asp>.

According to Boat US, the Raritan Electro Scan , for example, can treat waste "to a the fecal coliform (FCU) content of only 2.43FCU/100mL".

3. Conclusions and Recommendations

A. A no discharge zone should not be declared until adequate and reliable pumpouts have been installed in the South Sound. Currently, adequate pumpouts do not exist. For example, the large and popular area between Tacoma and Nisqually Reach/ Devils Head currently has no -- zero -- pumpouts useable by the numerous boats that are over 30 feet or not shoal draft. Zero is not adequate.

B. A no discharge zone should not be declared until pumpouts have been proven to operate reliably. To evaluate reliability, operational and closure data from Penrose Point be recorded and made publicly available, and two (2) years of actual operational and closure data from each new pumpout should be recorded and made publicly available..

C. To increase protection of Puget Sound in the interim, the fecal coliform limit for MSDs should be reduced to that achievable by the best available technology. To permit boats to replace 1000FCU/100mL MSDs with the best available technology, those meeting that standard should be "grandfathered". if a NDZ is ultimately adopted.

D. Any no discharge zone should provide a mechanism for permitting on board treatment systems as an alternative to holding tanks and pumpouts.

Thank you in advance for consideration of these comments.

Lee Roussel