



**DRAYTON HARBOR SHELLFISH PROTECTION DISTRICT
ADVISORY COMMITTEE**

MEETING SUMMARY

Date: June 16, 2004
Time: 4:00 – 6:00 p.m.
Place: Marine Drive Harbormaster Meeting Room – Blaine

AGENDA

1.	4:00	Public Comment Period
2.	4:05	Review Agenda and April Meeting Summary
3.	4:10	Blaine Harbor Water Quality Report 2003 – Julie Hirsch, Hirsch Consulting
4.	4:55	Drayton Harbor Water Quality Update – Geoff Menzies
5.	5:05	Rewrite of Status Plan Objective 3 – Discussion
6.	5:25	Final Planning for Open House
7.	5:50	New Business
8.	5:55	Next Meeting Agenda

MEETING ATTENDANCE

Committee Members

Geoff Menzies
Bob Williams
Bjorn Hrutfiord
Charlie Hawkins
Alan Birdsall
Jan Hansen

Others

Julie Hirsch – Hirsch Consulting Services
Sara Kinney – Nooksack Natural Resources
Scarlet Tang – Whatcom County Water Resources
Robert “Sandy” Petersen – City of Blaine
Mark Henderson – Ecology
Ken Carrasco – WSU Extension
Kati Johnson – Whatcom County Water Resources

DOCUMENTS DISTRIBUTED

- 6/16/04 Agenda
- 5/19/04 Issue For Approval meeting summary
- Rewrite of Status Plan Objectives 1-3 (distributed to AC members 6/10/04)
- WSU Extension Beach Watchers flyer
- WSU/PSAT Workshop for Birch Bay Residents flyer
- Drayton Harbor Water Quality FC/100 mL, 11/99-5/04
- Drayton Harbor Water Quality FC/100 mL, 11/99-5/04, MRC Handout
- Julie Hirsch’s PowerPoint presentation and tables
- Port of Bellingham: Drayton Harbor Water Quality Monitoring Summary for 2003 by Hirsch Consulting Services
- List of 2004 Open House participants with displays and event sponsors



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MEETING CONTENTS

1. Public Comment Period

Community Oyster Farm Harvest

Geoff Menzies announced that the first direct oyster harvest in Drayton Harbor since 12/94 took place at the Community Oyster Farm on 6/15/04. Thirty bushels of oysters were harvested from the one and one-half acre farm and were processed at Boundary Fish. Geoff noted that 50 dozen jumbo oysters are being sent to China, via Vancouver, B.C. as a test shipment.

Geoff explained that a Conditionally Approved (CA) classification is good, but about .33" of rain fell a few days before the expected opening of the beds that could have adversely affected the harvest. Recall that for CA, 0.5" of rainfall in a 24-hour period results in a 5-day closure of shellfish beds.

Geoff noted that an estimated 10,000 to 15,000 dozen oysters are on the farm to be harvested. From the ones he saw on 6/15, about 40% meet standards for the jumbo market and another 40% are medium to large and will be available for the Open House on 6/19. Geoff would like to find a local market for the oysters and noted that the sooner they are harvested the better because of their large size. Sale proceeds will fund additional on-the-ground projects in the Drayton Harbor watershed.

Geoff noted that he envisions a marketing strategy for Drayton Harbor oysters similar to that of Copper River Salmon. He asked members for input on possible local markets. Some of the suggestions included the Bellingham Farmer's Market and direct sales once a week. It was also suggested that the Community Oyster Farm work with the Port to possibly distribute the oysters at the Bellingham Fisherman's Wharf in Squaticum Harbor.

WSU Programs

Ken Carrasco had two announcements from the Washington State University (WSU) Extension office. WSU Extension and Puget Sound Action Team (PSAT) will be holding a free workshop for residents of Birch Bay on 8/14/04. The workshop will cover local geology, ecology and marine life. Ken distributed a flyer. Contact him for more information.

Ken also announced the WSU Whatcom County Beach Watchers Masters program to be held this fall. Participants receive 100 hours of training from experts on topics including beaches, geology, and marine life. In return, participants contribute 100 volunteer hours to the community. Ken distributed a flyer. Contact him for more information.

2. Review Agenda and Previous Meeting Summary

Members made one revision to the agenda—switch items 3 and 4. Members reviewed and approved the 5/19/04 Issue for Approval meeting summary as Final.

- *Action:* Kati Johnson will distribute the 5/19/04 Meeting Summary as final.



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3. Blaine Harbor Water Quality Report

Julie Hirsch gave a summary presentation on the Hirsch Consulting report *Port of Bellingham: Drayton Harbor Water Quality Monitoring Summary for 2003*. She distributed copies of her PowerPoint presentation and tables. Water quality has been monitored in Blaine Harbor since 1997. Two of the stations used by Hirsch Consulting—stations M and L—were discontinued in 2003. All samples were analyzed using the membrane filtration (MF) method. Additional samples were collected for run off and discharge as observed. Monitoring was done on 13 drains in 2003, and is continuing through the County's Shellfish Funding. In May 2003, DOH moved station 8 inland to just off the breakwater. Hirsch Consulting moved their station as well.

The State Department of Health (DOH) standard for fecal coliform (FC) is that the geometric mean value cannot exceed 14/100 mL and no more than 10% of samples may exceed 43/100 mL. Results showed that for 2003, all stations in both the commercial and recreational marina exceeded both parts of the FC water quality standard. There was a statistically significant increase from 2002 to 2003 in the geometric means at stations F and I (recreational). There was also an increase at station K (corresponds to DOH station 8) that was likely due to its relocation closer to the breakwater in 2003. In addition, the lowest FC densities were found in February and March and there were peaks in June, August, and December. There were peaks in FC without rainfall. The correlations between peaks in FC and rainfall were non-existent or very weak.

Over the long-term, there has been no statistically significant change in Blaine Harbor water quality from October 1997 to December 2003. The FC levels slightly change seasonally, but there are dry and wet weather spikes. Julie explained that she split the data into dry weather and wet weather. Wet weather was defined as a cumulative 4-day rainfall of 0.5 inches of rain or more. Rainfall plays an important influence in the levels of FC, but a t-test showed no direct linear correlation between rainfall and high FC.

Julie concluded that while rainfall is a contributor to elevated FC levels, there is something else contributing to elevated FC levels during dry weather. Hirsch Consulting sampled run off from 13 roof drains in the marina and found them to be very high. The highest FC levels were found in the run off from the webhouse rooftop and surrounding pavement and from the rooftop of Boundary Fish, including their icemaker drain.

Bird counts in Blaine Harbor were conducted and found that there was no correlation between total bird numbers and the FC densities at any of the sampling stations.

There are possible causes for high FC during dry weather including incubation periods, tidal washing at the breakwater, and visiting boats. Hirsch Consulting made several recommendations including taking additional samples at DOH stations 8 and 15, at the mouth of the harbor; continue to manage boaters' sewage treatment; evaluate the effect of bird feces on the breakwater; inspection of the Boundary Fish icemaker to be sure no bird



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feces are combining with the discharge; and use bacterial source tracking to identify FC sources.

The AC thanked Julie for her hard work taking samples and putting all the information together. Members had a few questions for Julie after her presentation. One member wondered if any sampling is done after the peak flow, as a way to define the whole curve. Julie noted that sampling is done when possible and that sampling has likely been done all along the curve, but not during a single storm event. Another member wondered if there was a way to have a catch device on the drains to get the initial run off from the beginning of a storm. Julie said it would be possible, but there are issues with holding times for bacteria.

Geoff noted that he thought it would be useful for the AC to form a data subcommittee again to help the AC make more intelligent recommendations for DH. There is a lot of data that, once organized, could be used to define and develop a water quality monitoring program and get it funded. Geoff noted that it would be valuable to use special techniques in DH to get information on whether FC is from humans or livestock, humans or birds, etc. The science is still improving but some tests can be as much as \$500 per sample. He noted that the large bird population, visiting boaters, and FC spikes during dry weather are concerns to the water quality of DH. Geoff suggested greywater discharge from boats be addressed as a possible contributor to elevated FC levels. One AC member noted that since there are so many factors during the summer months that could be affecting FC levels, it would be useful to do further analysis such as bacterial source tracking.

One member wondered if the water quality in DH compares to the water quality in similar harbors. Julie said she has looked online for data but there is not very much. She has found reports that FC numbers are high but has not seen the actual data. She noted that the National Estuary Program is driven by shellfish as an indicator of water quality and has a lot of data. She suggested the AC find out what it would take to become involved in the program.

One member suggested that the water quality be compared after the new Blaine sewage treatment plant is completed to before it went online. Geoff noted that he had hoped to see improvements in the water quality after the video and dye testing and subsequent repairs but there were not.

Alan Birdsall distributed hard copies of the *Port of Bellingham: Drayton Harbor Water Quality Monitoring Summary for 2003* by Hirsch Consulting Services. A copy will be available in the Water Resources library.

4. Drayton Harbor Water Quality Update

Geoff provided a summary of one water sampling project in Drayton Harbor (DH) from Fall 2003 to Spring 2004. Whatcom County shellfish funds support projects in DH. This project cost about \$2800 and was supported by Puget Sound Restoration Fund (PSRF), DOH, Whatcom County Water Resources and citizens.



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The purpose of the project was to supplement the DOH dataset in order to obtain a timely reclassification of DH. DOH is only mandated to sample in DH six times a year. Another goal was to broaden citizen training and exposure.

From November 2003 to May 2004, DOH took three samples; PSRF took nine samples. Four of the twelve samples were collected during wet weather conditions and were excluded from the DOH dataset used for Conditionally Approved evaluation. Wet weather is defined by DOH as 0.5" or more rainfall within 24 hours on the sample date or in any 24 hour period four days prior to the sample date. Geoff noted that the City of Blaine STP measures rainfall and gives the information to DOH. One attendee wondered if the City could post its rainfall data (last ten days, or so) on its website for others to view. Sandy Petersen said that might be possible. Geoff noted that he gets his rainfall data from a Surrey, B.C. website www.wunderground.com

Geoff noted that FC ranges during wet weather appear to be higher than during dry weather—except for station 8. FC counts look best during dry weather and flood tide (e.g., 11/5/03, 2/100 mL to 33/100 mL). FC counts look worst during wet weather and ebb tide (e.g., 11/20/03, 130/100 mL to 920/100 mL).

Geoff displayed the map of new classification boundaries in DH, as included in the DOH May 2004 Sanitary Survey. Geoff noted that an area without a sampling station could not be classified, as with the west side of DH.

DOH recommended, in the Sanitary Survey, that more sampling be done in DH; stormwater discharge should be monitored; sampling should continue in freshwater creeks and Blaine Harbor; add stations on the west side of DH; and confirm the sources of pollution at stations 8 and 15.

One member wondered to whom the DOH Sanitary Survey was released. The results of this supplemental sampling program in Drayton Harbor will be presented to the Blaine City Council and Whatcom County Council. DOH Sanitary Survey reports go to supporting agencies and on the Whatcom County Water Resources website and library. Reports are not submitted to academic journals, nor are they released directly to the public, though they could be accessed under the Freedom of Information Act.

Geoff noted it would be useful to someday gather (with funding) all the information about the recent 15-year story of Drayton Harbor (water quality and shellfish restoration efforts etc.) for other areas/Shellfish Protection Districts to learn from. Ken wondered if this project would make a good masters thesis. Geoff agreed that it could.

5. Rewrite of Status Plan Objective 3

There was not enough time to discuss the rewrite of Objective 3. Geoff proposed to the AC that since group writing is often difficult, he would rewrite the rest of the Plan, consult appropriate agencies to refine the recommendations, and present the revised Plan to the AC for feedback. The AC agreed that this would be a good strategy. Geoff plans to have the



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updated Plan rewritten by September.

6. Final Planning on the Open House

Bob noted that the food is taken care of. In addition to the BBQ oysters, there will be lemonade, exotic cheeses, and shrimp. Geoff noted that many of the paper products are taken care of but that there needs to be a couple hundred heavy-duty 8 to 10-inch plates for the oysters.

Geoff reminded AC members that they are invited to a brunch from 10:00 to 11:30 a.m. at the Resort. Festivities begin at the Harbor at noon. Geoff will be setting up and marking tables for the displays on Friday, 6/18. The oysters will be on ice in the harbormaster meeting room overnight. Small oysters will be purchased for those who do not want to have the larger ones from the Community Oyster Farm. The refrigerator in the harbormaster meeting room will be available. Bjorn Hrutfiord will bring one BBQ; Geoff will bring two. Geoff is looking into getting some picnic tables to put outside. Alan Birdsall will inquire into bringing Port picnic tables.

- *Action:* Alan Birdsall will check into borrowing Port picnic tables for the Open House.

The Plover will be running from noon to four, taking people to see the oyster beds. The oyster boat "The Beast" and Steve Seymour's boat will also be taking people out. Life jackets will be provided. Hip boots will also be available for people to use to get closer to the oyster beds. The Coast Guard will have one of its boats in DH during the Open House.

The Advisory Committee's main role at the Open House is public education. To help identify AC members, Scarlet will make nametags for each. AC members were encouraged to share information with Open House attendees.

- *Action:* Scarlet Tang will make a nametag for each AC member.

Geoff distributed a list of Open House participants with displays and event sponsors. It is his hope that someday, the Open House would be a community-wide, community-sponsored event.

7. New Business

There was no new business to note.

8. Next Meeting Agenda

The next meeting is scheduled for July 21, 2004. An agenda was not discussed.