

Staff Report of Oakland Bay Activities 10/1/08 to 12/31/08

1/15/09
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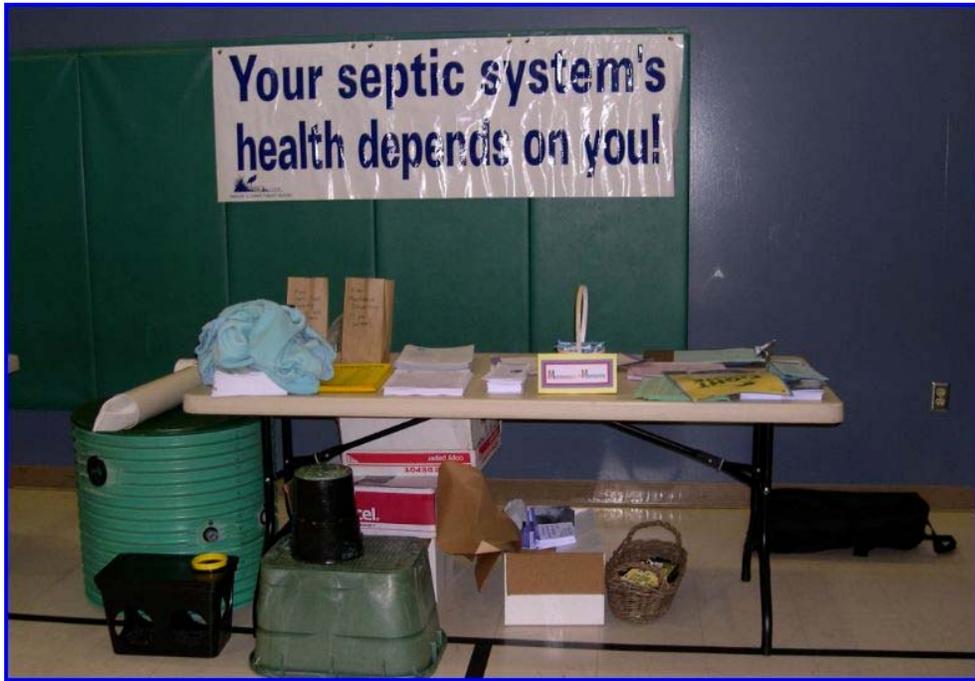


Citizens looking at some of the displays during the Oakland Bay open house

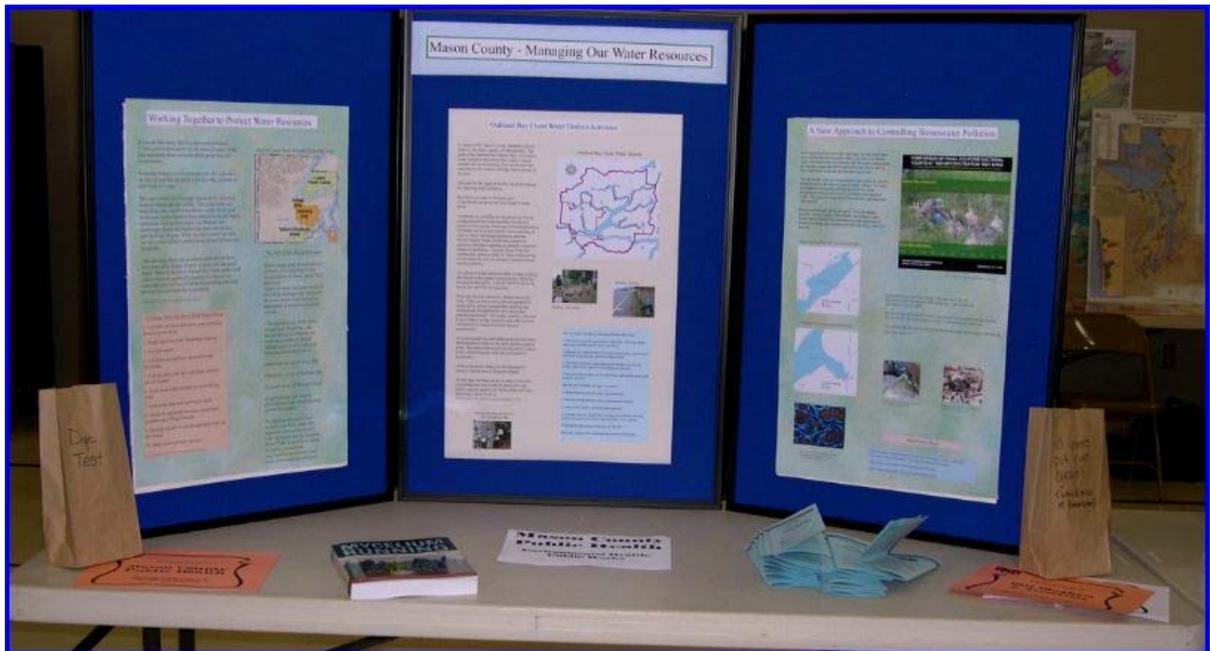
Task 1-Coordination, Updates and Public Education on implementation work

During the 4th quarter of 2008 MCPH held three Oakland Bay Closure Response Group meetings. Meeting notes and monthly updates on sampling activities were distributed at the meetings. Three verbal monthly updates were given to the group. The meeting notes have been attached to this report.

Mason County Health staffed two Public Education booths this quarter. An updated display was developed for the two community events to provide the public with background on pollution problems in Oakland Bay as well as information on how shoreline surveys and other actions will help correct the problems. The display posters were attached to the last quarter's report since the work developing the display was done at the end of last quarter. Both events were well attended. Oysterfest is a regional event that draws thousands of visitors a year. The Oakland Bay Public Meeting was a special event put on right in the heart of the Clean Water District. Over 100 members of the public attended. Feedback on the work being done in Oakland Bay was very positive at both events. Additional pictures from the Open House can be provided upon request.



Mason County Public Health booth- On Site



Mason County Public Health Booth- Water Quality

Staff attended Mason County Public Works mycoremediation project meetings. Mason County Public Health, Mason County Public Works, Mason County Utilities and the Mason Conservation District are working to make sure all stormwater implementation projects in the area complement each other. Staff is providing some assistance on water quality issues related to stormwater.

Staff attended Squaxin Island Tribe's Western Estuary project meetings. One of the tasks in the WEI project is to do social marketing research in the Oakland Bay watershed. Staff provided input on septic system survey questions. The survey is designed to get at what the values and beliefs of the residents are in regard to septic maintenance in order to effectively market desired practices to them in the future.

Task 2-District Development

The county commissioners made appointments to the Oakland Bay Clean Water District Advisory Committee this quarter. Staff worked this quarter filling any remaining vacancies on the board. One new shellfish grower – Clam Fresh has started attending meetings with the understanding that if it is a good fit with their schedule and interests they will become a board member.

Staff and management attended one Board of Oakland Bay Clean Water District meeting (which is the county commission in their role as governing body for the district). Staff reports had been written for the meeting but were not presented due to time constraints.

Task 3-Identifying On-site Sewage System Sources

The staff person primarily responsible for fieldwork, Christine Clark, was let go at the end of this quarter due to department budget constraints and her position of seniority within the department. Next quarter Carol Spaulding will be trained to take her place. Carol was formerly our lab specialist and has done water quality fieldwork in the past. Work was somewhat limited in December due to poor weather and tide conditions.

Shoreline survey work was continued this quarter in the northwest section. This section is mostly along Hwy 3. Potential stormwater and residential sources were surveyed and sampled in this area. All shoreline survey and stream segmenting locations in the upper Oakland Bay area are shown in figure 1.

Figure 1 Shoreline and Stream sample locations in upper Oakland

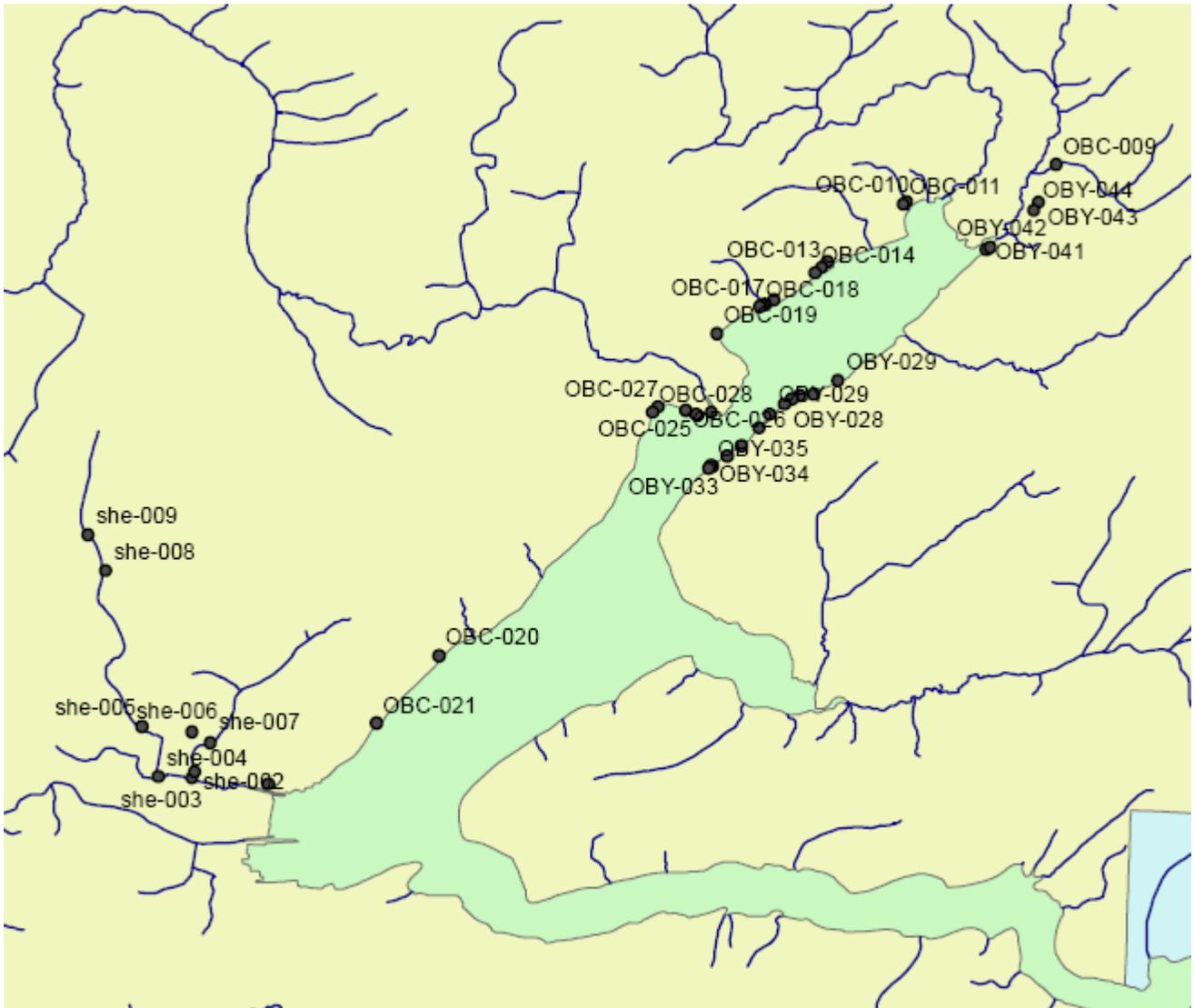


Table 1 Oakland Bay results for Hwy 3 area (in FC/100 mL)

| Site | Geometric Mean | 10/07/08 | 11/18/08 | 11/24/08 | 11/25/08 |
|---------|----------------|----------|----------|----------|----------|
| OBC-006 | 11.00 | | | 11 | |
| OBC-008 | 80.28 | | | 2 | |
| OBC-009 | 99.50 | | | 11 | |
| OBC-010 | 13.00 | | | 13 | |
| OBC-011 | 8.00 | | | 8 | |
| OBC-013 | 220.00 | | | 220 | |
| OBC-014 | 8.77 | | | 11 | |
| OBC-015 | 2.00 | | | 2 | |
| OBC-016 | 12.65 | | | 2 | |
| OBC-017 | 11.00 | | | 11 | |
| OBC-018 | 5.29 | | | 14 | |
| OBC-019 | 5.10 | | | | 13 |
| OBC-020 | 4.69 | 11 | | | 2 |
| OBC-021 | 5.83 | 17 | | | 2 |
| OBC-022 | 8.00 | | 8 | | |
| OBC-023 | 1.90 | | 1.9 | | |
| OBC-024 | 8.00 | | 8 | | |
| OBC-025 | 8.00 | | 8 | | |
| OBC-026 | 17.00 | | 17 | | |
| OBC-027 | 8.00 | | 8 | | |
| OBC-028 | 17.00 | | 17 | | |

Additional samples will be collected next quarter and any stormwater problems referred to other departments. On-site issues will be addressed through this grant.

Shoreline survey was wrapped up this quarter in the northeast section between Gosser Rd. and Beaver Lane. One vacation cabin was selected for a dye trace due to high fecal coliform counts. The owners agreed to allow a dye trace and one was scheduled for the last part of December. Unfortunately bad weather prevented us from proceeding with the plan. Now we will have to wait until the next time the family is using the cabin for an extended period in order to have a valid dye trace result. Results are shown in Table 2. Sampling within the city of Shelton is shown in Table 3.

Table 2- Results for Gosser to Beaver Ln. (in FC/100mL)

| Site | Geometric Mean | 10/15/08 | 12/09/08 |
|---------|----------------|----------|----------|
| | | calc | calc |
| OBY-024 | 27.50 | 2 | |
| OBY-029 | 1.95 | 1.9 | |
| OBY-030 | 10.00 | 2 | |
| OBY-031 | 2.00 | | |
| OBY-032 | 203.67 | 22 | |
| OBY-035 | 36.88 | 8 | |
| OBY-045 | 17.00 | | 17 |
| OBY-046 | 7.00 | | 7 |

Table 3 Shelton Results (in FD/100mL)

| Site | Geometric Mean | # samples | 12/04/08 | 12/09/08 |
|---------|----------------|-----------|----------|----------|
| | | | calc | calc |
| SHE-001 | 23.00 | 1 | 23 | |
| SHE-002 | 7.00 | 1 | 7 | |
| SHE-003 | 11.00 | 1 | 11 | |
| SHE-004 | 50.00 | 1 | 50 | |
| SHE-005 | 1.90 | 1 | 1.9 | |
| SHE-006 | 23.00 | 1 | | 23 |
| SHE-007 | 8.00 | 1 | | 8 |

Staff continued work on a mycoremediation project this quarter. Mycoremediation uses mushroom mycelium to reduce fecal coliform in stormwater drainages. This is an experimental technology that Mason County is exploring with the inventor. Two additional sites received mycoremediation installations this quarter bringing the total up to three for Oakland Bay. Staff sampled above and below the new installations to verify that some reduction was occurring. More extensive sampling will occur after the project QAPP is approved by Ecology.

One dye trace was scheduled for the Walker Park area at the end of December. It has been deferred to next quarter due to bad weather.

Task 4 -Water Quality Education

During the fourth quarter of 2008 WSU Extension Mason County participated in a variety of tasks related to task 4 "Water Quality Education."

Staff participated in the monthly Oakland Bay Clean Water District Advisory committee meetings between October and December and provided updates on activities.

WSU Extension Mason Co met with Mason Co Commissioners as a board representative to form the official Oakland Bay Clean Water District Advisory committee. A book profiling events that took place in Oakland Bay was created to present to the Commissioners highlighting workshops, education and outreach.

On October 8th, WSU Extension Mason Co helped to organize and participated in hosting the Oakland Bay Community Meeting held at Pioneer School. All residents within the Oakland Bay Clean Water District were sent a mailing to invite them to take part and learn about WA Dept. of Ecology's Oakland Bay TMDL clean-up plan for bacteria, the status of shellfish harvesting in Oakland Bay, what has been done to improve water quality, and the Sa-Heh-Wa-Mish Stewardship initiative. Community member participation estimated near 100. WSU Extension Mason Co. organized educational booths with 20 organizations at the event and Taylor Shellfish generously provided dinner for the meeting. The evening featured several presentations, questions and answers and an informal open house. Prior to the meeting, environmental education related to salmon and water quality took place with approximately 150 children.

A Low Impact Development Realtor Ed course was held at the Shelton Civic Center on October 27th with 28 people attending including three staff from the Mason Co. Planning Dept. One Septic System Operation and Maintenance Workshops was held on November 5th with a total of around 15 participants- a large portion of who live within the watershed boundaries. This workshop was made possible through a partnership with Mason County Public Health.

There was a great deal of media coverage for the community meeting as well as for all the educational workshops.

Staff attended two Education and Outreach Sub-committee meetings with the chosen social marketing consultant, Keller Consulting, to finalize the research proposal, which will be completed with Oakland Bay residents during the month of December for the Sa-Heh-Wa-Mish Stewardship Initiative.

Another Septic System Operation and Maintenance class will be held on January 26th, 2009 and planning has begun for a future Raingarden workshop and a Shoreline Living workshop for local residents. Also, planning for water quality-focused environmental education days with 4-H members is occurring for the winter and spring of 2009.