

# Cranberry, Johns, and Mill Creeks Temperature TMDL Advisory Group Meeting

Thursday, October 13, 2011 – 1:30 to 3:45 p.m.  
Mason County Public Works, 100 W. Public Works Dr., Shelton

## Attendees

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### Citizens

- Tom Davis
- Robert Johnson
- Gerry Ring-Erickson
- Terri Thompson
- Patricia Vandehey
- Conley Watson

### Ecology, WA State Dept. of

- Kim McKee
- Lydia Wagner

### Green Diamond Resource Company

- Patti Case

### H & R Waterworks

- James Campbell

### Mason Conservation District

- John Bolender
- Evan Bauder

### Mason County Commissioner

- Steve Bloomfield

### Mason County Public Health

- Stephanie Kenny
- Debbie Riley

### Mason County Public Works

- Jeremy Graham
- Loretta Swanson

### Shelton, City of

- Dennis McDonald

### Simpson Lumber Company

- Linda Matthews

### Washington Sea Grant

- Teri King

### WSU Mason Extension Office

- Emily Sanford
- Bob Simmons

## Technical Study Background

*Kim McKee, Department of Ecology, Water Quality Program*

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Kim provided background information on when efforts began for this water cleanup plan. In 2003, internal discussions started with the original focus on fecal coliform bacteria in Oakland Bay. Ecology and the Squaxin Island Tribe collected field data in 2006 and as a result it was clear we also needed to address temperature issues. When the Oakland Bay Clean Water District formed in 2007 to address shellfish closures, Ecology decided to focus efforts on addressing fecal coliform bacteria first and would continue work on temperature issues later.

In November 2008, Ecology began drafting the Oakland Bay Fecal Coliform Total Maximum Daily Load (TMDL). Due to staff changes and limited resources, work slowed down on this effort. In June 2011, Ecology submitted the completed *Oakland Bay, Hammersley Inlet, and Selected Tributaries TMDL Water Quality Improvement Report and Implementation Plan* to the U.S. Environmental Protection Agency (EPA). They approved the report in August 2011.

In October 2011, Ecology is convening the first advisory group meeting to address temperature issues for certain Oakland Bay tributaries. They are targeting completion of the Cranberry, Johns, and Mill Creeks Temperature TMDL WQIR/WQIP for September 2012.

Temperature considerations:

- The temperature in these three creeks is too warm and can be harmful to fish.
- We estimate it will take approximately 100 years to meet the water quality standards if we act now to increase the riparian vegetation in these creeks.
- There are water quality standards for temperature, following federal criteria for beneficial use.
- Solar radiation is a source of heat. Our goal is not to reduce temperature directly. Instead we look at a surrogate goal of establishing shade. We need to create more shade to result in cooler water. Anise Ahmed, Ecology, Environmental Assessment Program, conducted a Water Quality Study and focused on establishing shade in the system.
- The cleanup plan does not directly address instream flow. Ecology's Water Resources Program is working on instream flow.
- Ecology has already completed approximately 15 TMDLs addressing temperature. This helps in streamlining the process somewhat because we can draw on the experience of those other plans to help in developing this one.

***General discussion & questions***

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Q: *Did Ecology consider natural sources such as wetlands, lakes, and glaciers?*

A: Yes

Q: *Is Ecology aware of any sources discharging chemicals into these streams?*

A: No, we are not aware of any. We will look at discharge permits issued for this watershed to see if there are potential issues.

Q: A comment was made regarding Webb hill and nitrate excessive nitrate levels in 2008. *Can this be a cause of the increased water temperature?*

A: It is not likely. There are no waterbodies in this area included on the 303(d) list for dissolved oxygen.

Q: *Why isn't Ecology including instream flow concerns with TMDLs?* The issues are interrelated and it makes more sense to approach the watershed from a holistic point of view.

A: The agency has several programs addressing water issues. The Water Quality Program addresses water quality. The Water Resources Program addresses instream flow. We will ask a staff person from the WR Program to attend the next meeting.

Q: *Will Ecology reinstate the WRIA process for this area?*

A: Probably not. The Water Resource Program oversaw this effort and they have had significant staff and resource reductions over the last few years.

Q: *Would a weir adjust the temperature in a stream?*

A: Possibly.

Q: *Is Ecology basing the report on the Water Quality Study from 2006?*

A: Yes. (Follow-up: After the meeting, Ecology provided the draft study on a secure website.)

Q: *Have any new studies or monitoring been done to see if there is still an issue with these creeks?*

A: None by Ecology. We can follow up to identify any monitoring done by other organizations.

Q: *Will there be a data gap in this TMDL?*

A: Probably. We will look at data from the Washington State Department of Health (DOH) and Ecology's Environmental Information Management (EIM) System database for water quality monitoring data. We can also ask other organizations (such as Mason County or the Squaxin Island Tribe) if they have water quality monitoring data.

*Additional information:* The Mason Conservation District has GIS data compiled for the Riparian Assessment Report.

Q: *Why isn't Deer Creek included?*

A: The water quality study pulled information from the Washington State 2004 303(d) list and Deer Creek was not on it for temperature. *(Follow-up: The 2008 303(d) list does include Deer Creek.)*

Q: *Are there programs to help private landowners plant or harvest trees?*

A: Forested landowners must follow forest laws for harvesting. The Washington State Department of Natural Resources (DNR) manages these laws. Green Diamond Resource Company has a Habitat Conservation Plan for this area. Mason County and the City of Shelton both have Critical Area Ordinances. There are requirements in place and the challenge is ensuring compliance with these requirements.

Comment: There is concern about illegal withdrawals and deposits.

Response: Anyone can contact Ecology to report their environmental concerns. The meeting notes will include applicable information to make a complaint online or by phone.

Q: It takes a certain amount of energy to cool or heat the water. *Is our goal achievable? Can we be successful?*

A: Yes, according to information provided in the Water Quality Study.

Q: *Who else should be participating at these advisory group meetings?* The group came up with the following suggestions.

- Ace Paving
- Agate Grange
- Shelton, City of
- Ecology's DAM Safety Program
- Local businesses along Mill Creek
- Mason County Department of Community Development (Shoreline Master Program)
- Mason PUD #3
- Noxious Weed Board (Pat Grover)
- Railroad
- Squaxin Island Tribe
- Washington State Parks

## Water Cleanup Process Overview & Draft Timeline

Lydia Wagner, Department of Ecology, Water Quality Program

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Ecology is developing a water cleanup plan to address temperature issues in Cranberry, Johns, and Mill Creeks. The water cleanup plan includes three segments: Water Quality Study, Water Quality Improvement Report (WQIR), and Water Quality Implementation Plan (WQIP). The study is already completed and work is now underway to identify effective shade targets and an implementation plan to meet those targets. The advisory group's involvement is an important part of this effort.

### Key timeline targets:

- *August 2011 – January/February 2012*: Development of the water cleanup plan (incorporates technical study and adds the Water Quality Improvement Report and Water Quality Implementation Plan)
- *October 2011 - May/June 2012*: Advisory Group involvement
- *April/May 2012*: Government-to-government review of draft plan by the U.S. Environmental Protection Agency (EPA) and Squaxin Island Tribe
- *May/June 2012*: Draft plan provided to Advisory Group for review and comment
- *June/July 2012*: 30-day Public Comment Period
- *July/August or August/September 2012*: Ecology prepares Response to Comments and finalizes the plan
- *September/October 2012*: Final plan submitted to EPA for review and approval

### Contact information:

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Kim McKee

360-407-6407

[Kim.McKee@ecy.wa.gov](mailto:Kim.McKee@ecy.wa.gov)

*All meeting materials are available online as follows:*

- **Water Quality Study Background**, Kim McKee:  
[http://www.ecy.wa.gov/programs/wq/tmdl/oakland\\_bay/index.html 101311-OB-Tribs-Temp-AdvMtg-Background-KM.pdf](http://www.ecy.wa.gov/programs/wq/tmdl/oakland_bay/index.html 101311-OB-Tribs-Temp-AdvMtg-Background-KM.pdf)
- **Water Cleanup Plan Process Overview**, Lydia Wagner:  
[http://www.ecy.wa.gov/programs/wq/tmdl/oakland\\_bay/index.html 101311-OB-Tribs-Temp-AdvMtg-Process-LCW.pdf](http://www.ecy.wa.gov/programs/wq/tmdl/oakland_bay/index.html 101311-OB-Tribs-Temp-AdvMtg-Process-LCW.pdf)
- **Draft Timeline**: [http://www.ecy.wa.gov/programs/wq/tmdl/oakland\\_bay/index.html 101311-OB-Tribs-Temp-AdvMtg-Timeline-Draft.pdf](http://www.ecy.wa.gov/programs/wq/tmdl/oakland_bay/index.html 101311-OB-Tribs-Temp-AdvMtg-Timeline-Draft.pdf)
- **Draft Action Plan Table**: [http://www.ecy.wa.gov/programs/wq/tmdl/oakland\\_bay/index.html 101311-OB-Tribs-Temp-AdvMtg-ActionPlanTable-Draft.pdf](http://www.ecy.wa.gov/programs/wq/tmdl/oakland_bay/index.html 101311-OB-Tribs-Temp-AdvMtg-ActionPlanTable-Draft.pdf)

*Follow-up needed:*

- Contact other parties suggested during the meeting who may have an interest or responsibility for environmental issues related to Cranberry, Johns, or Mill Creeks.
- Check on sampling data and address data gaps from the end of study to present.

## Website links:

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### Ground & Surface Water Quality Standards homepage:

<http://www.ecy.wa.gov/programs/wq/links/standards.html>

- Surface Water Quality Standards: <http://www.ecy.wa.gov/programs/wq/swqs/index.html>
- Designated Uses: [http://www.ecy.wa.gov/programs/wq/swqs/desig\\_uses.html](http://www.ecy.wa.gov/programs/wq/swqs/desig_uses.html)
- Surface Water Criteria: <http://www.ecy.wa.gov/programs/wq/swqs/criteria.html>

### Water Quality Assessment and Improvement Projects (TMDLs) homepage:

[http://www.ecy.wa.gov/programs/wq/links/wq\\_assessments.html](http://www.ecy.wa.gov/programs/wq/links/wq_assessments.html)

- TMDLs in WRIA 14, Kennedy-Goldsborough:  
<http://www.ecy.wa.gov/programs/wq/tmdl/TMDLsbyWria/tmdl-wria14.html>
- Quality Assurance Project Plan: Total Maximum Daily Load Analysis for Temperature in Tributaries to Oakland Bay-Hammersley Inlet: Mill Creek, Cranberry Creek, and Johns Creek:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/0503107.html>
- Oakland Bay, Hammersley Inlet, & Selected Tributaries Fecal Coliform Bacteria Total Maximum Daily Load Water Quality Improvement Report (WQIR)/Implementation Plan (WQIP):  
<https://fortress.wa.gov/ecy/publications/SummaryPages/1110039.html>
- Fresh water designated uses and criteria for temperature, WAC 173-201A-200:  
[http://www.ecy.wa.gov/programs/wq/swqs/criteria-freshwater/wac173201a\\_200-temp.html](http://www.ecy.wa.gov/programs/wq/swqs/criteria-freshwater/wac173201a_200-temp.html)
- Marine temperature criteria, WAC 173-201A-210:  
[http://www.ecy.wa.gov/programs/wq/swqs/criteria-marine/wac173201a\\_210-temp.html](http://www.ecy.wa.gov/programs/wq/swqs/criteria-marine/wac173201a_210-temp.html)

### Temperature TMDLs:

- Bear-Evans Watershed Temperature and Dissolved Oxygen WQIR:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/0810058.html>
- Green River WQIR:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/1110046.html>
- Little Klickitat River Watershed WQIP:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/0410075.html>
- Lower Skagit River WQIR:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/0810020.html>
- Snoqualmie River Basin:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/1110041.html>
- South Prairie Creek WQIP:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/0610018.html>
- Stillaguamish River Watershed WQIR:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/0610057.html>
- Upper Natches River and Cowiche Creek Implementation Strategy:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/1010068.html>
- Walla Walla Watershed:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/0710030.html>
- Wenatchee River Watershed WQIR:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/0710045.html>
- Willapa River Watershed WQIR/WQIP:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/0510073.html>
- Wind River Watershed WQIP:  
<https://fortress.wa.gov/ecy/publications/SummaryPages/0410037.html>

### Ecology, Water Resources, Instream Flow homepage:

<http://www.ecy.wa.gov/programs/wr/instream-flows/isfhtm.html>

**Ecology, Environmental Information Management (EIM) homepage:** <http://www.ecy.wa.gov/eim/>

### Reporting Environmental Concerns:

- Reporting Environmental Problems homepage:  
<http://www.ecy.wa.gov/reportenvioproblem.html#report>
- Call Ecology's Southwest Region Office at 360-407-6300
- Submit online Environmental Incident Report Form:  
[http://www.ecy.wa.gov/programs/spills/forms/nerts\\_online/SWRO\\_nerts\\_online.html](http://www.ecy.wa.gov/programs/spills/forms/nerts_online/SWRO_nerts_online.html)

### Acronyms:

EPA: U.S. Environmental Protection Agency  
QAPP: Quality Assurance Project Plan  
TMDL: Total Maximum Daily Load  
WQ: Water quality

WQIP: Water Quality Implementation Plan  
WQIR: Water Quality Improvement Report  
WQS: Water Quality Standards

### Next meeting

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Date: Friday, December 9, 2011  
Time: 1:00 – 3:00 p.m.  
Place: Mason County Public Works, 100 W. Public Works Dr., Shelton

To make the meetings more productive and stay on task, Ecology asks advisory group members to consider the following regarding areas on or near Cranberry, Johns, and Mill Creeks:

- Identify areas where we need more shade. Provide as many specifics as possible (*address, which creek is nearby*).
- Identify landowners in areas where we need more shade. Provide as many specifics as possible (*name, phone, e-mail*).
- Is there currently any riparian type work going on? If so, please provide specifics. (*What is the work? Who is doing it? Where is it happening?*)