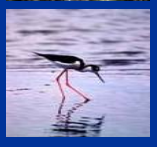






WASHINGTON STATE DEPARTMENT OF ECOLOGY

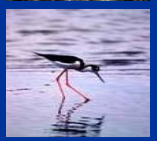
Sinclair & Dyes Inlets Fecal Coliform TMDL

Community Advisory Committee

February 21, 2008

Sally Lawrence
Water Quality Program
(425) 649-7036
slaw461@ecy.wa.gov



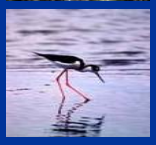



Overview

- What is a TMDL?
- What is this TMDL about, and how will it involve members of the West Side Watershed?
- Relating this TMDL to the goal of cleaner Puget Sound in 2020

Clean Water Framework



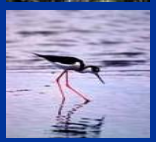



- Federal Clean Water Act – protect, restore nation's waters
- State Water Quality Standards – protect beneficial uses
  - – Shellfish harvest & recreation
  - – Public health, aquatic life

TMDLs Defined







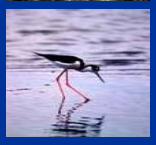
– **Total Maximum Daily Load = the maximum input of a pollutant that still allows water body to meet standards**

TMDL = Waste load allocations +

Load allocations + Safety Factor





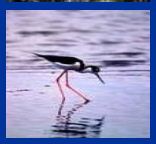


The Two TMDL Tasks

- **Quantify -- How much bacteria can these two marine inlets accept and still meet state standards?**
- **Implement – What approaches will be successful in achieving bacteria reductions?**





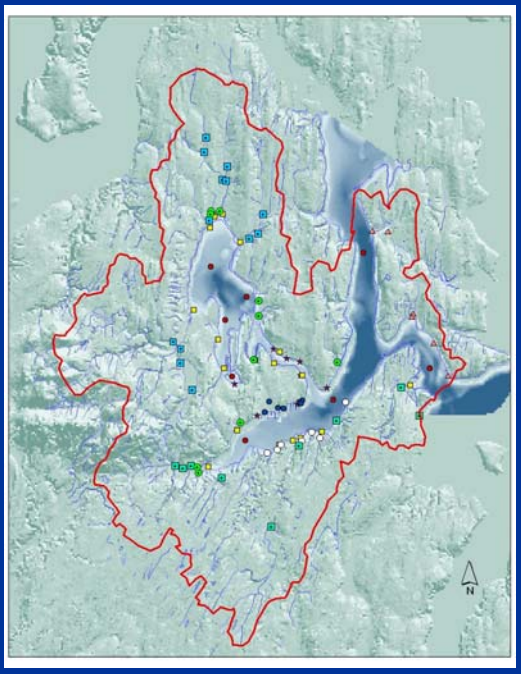


Sinclair & Dyes Inlets TMDL

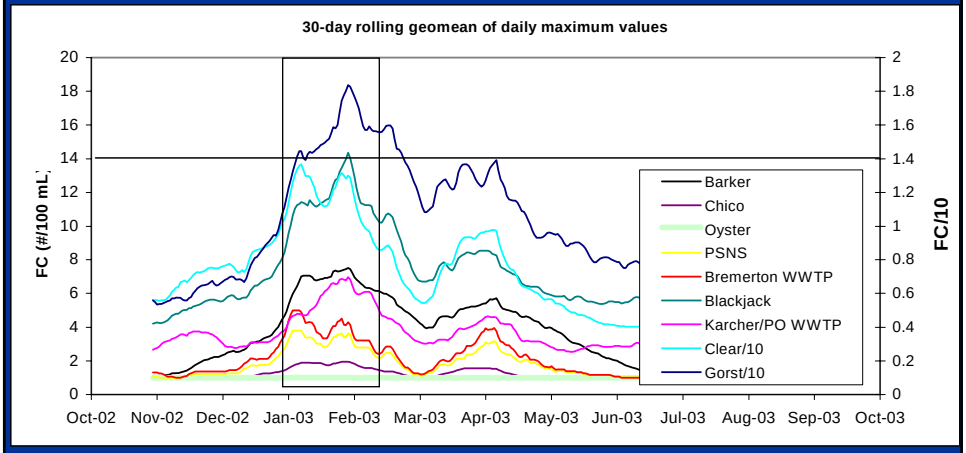
- **Navy**
  - **Develop & test models -- Make results accessible & understandable**
  - **Partnerships – data collection**
- **Ecology**
  - **Review model design & results**
  - **Define critical conditions & Define model runs (Regulatory Workgroup)**
  - **Set Wasteload & Load Allocations**

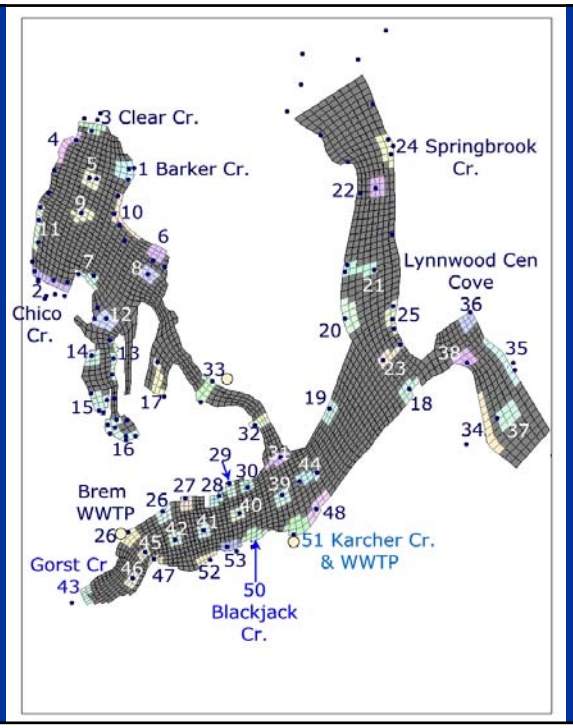
Cooperative Effort

- US-EPA
- PSNS
- WA-DOE
- WA-DOH
- Suquamish Tribe
- KCHD
- Kitsap SWM
- Kitsap PUD
- Bremerton
- Port Orchard
- Bainbridge
- Battelle MSL



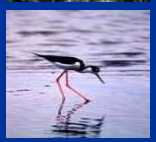
2003 – the “one-year trace”











Model Results

- **Dyes Inlet results similar to state DOH Shellfish Classifications**
- **Less accurate in some low-flushing bays – help source ID**
- **Reductions needed – Blackjack, Clear, Gorst, Chico**



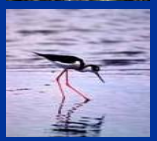


Next steps - 2008

- **Setting Wasteload Allocations and Load Allocations *(Ecology and EPA coordination)***
- **Implementation Plan – Ecology lead with local partners**
  - **Review problem locations/sources**
  - **Review existing practices**
  - **Define needed practices, structures, programs**





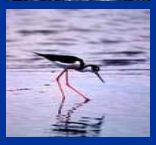


TMDL Implementation Plan

- **Actions that will reduce FC bacteria**
- **Point sources – municipal stormwater permittees, WWTPs**
- **Nonpoint – onsite septic systems, marinas, pet waste**







TMDL Link to Phase II Municipal Stormwater Permit

Permittees: Bremerton, Bainbridge Island, Port Orchard, Kitsap County

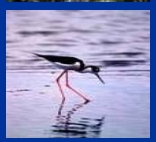
General permit requirements – will these reduce FC bacteria?

Specific TMDL-related requirements attached to next issued Phase II permit

Incentive to reduce FC early?

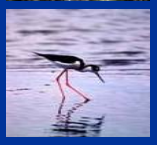






Implementation Plan - Nonpoint

- **Current programs (Kitsap Health PIC) to address bacteria inputs to streams**
- **Further identify FC sources**
- **Shoreline sources – boats and marinas**
- **Better funding & programs to prevent/reduce spills/CSOs/replace aging sewer infrastructure**



More info & Link to Puget Sound Partnership

http://www.ecy.wa.gov/programs/wq/tmdl/sinclair-dyes_inlets/index.html

Study results apply to many Puget Sound shorelines

Bob Johnston appointed to PSP Science Panel

For More Information:

Darcy Jenne
Congressional & Public Affairs Office
Puget Sound Naval Shipyard & IMF
Phone: (360) 476-7111
Email: pao@psns.navy.mil

DouGlas Palenshus
Water Quality Program, Northwest Regional Office
WA Department of Ecology
Phone: (425) 649-7041
Email: dpal461@ecy.wa.gov