



Washington State Department of  
*Health*

*Office of Shellfish &  
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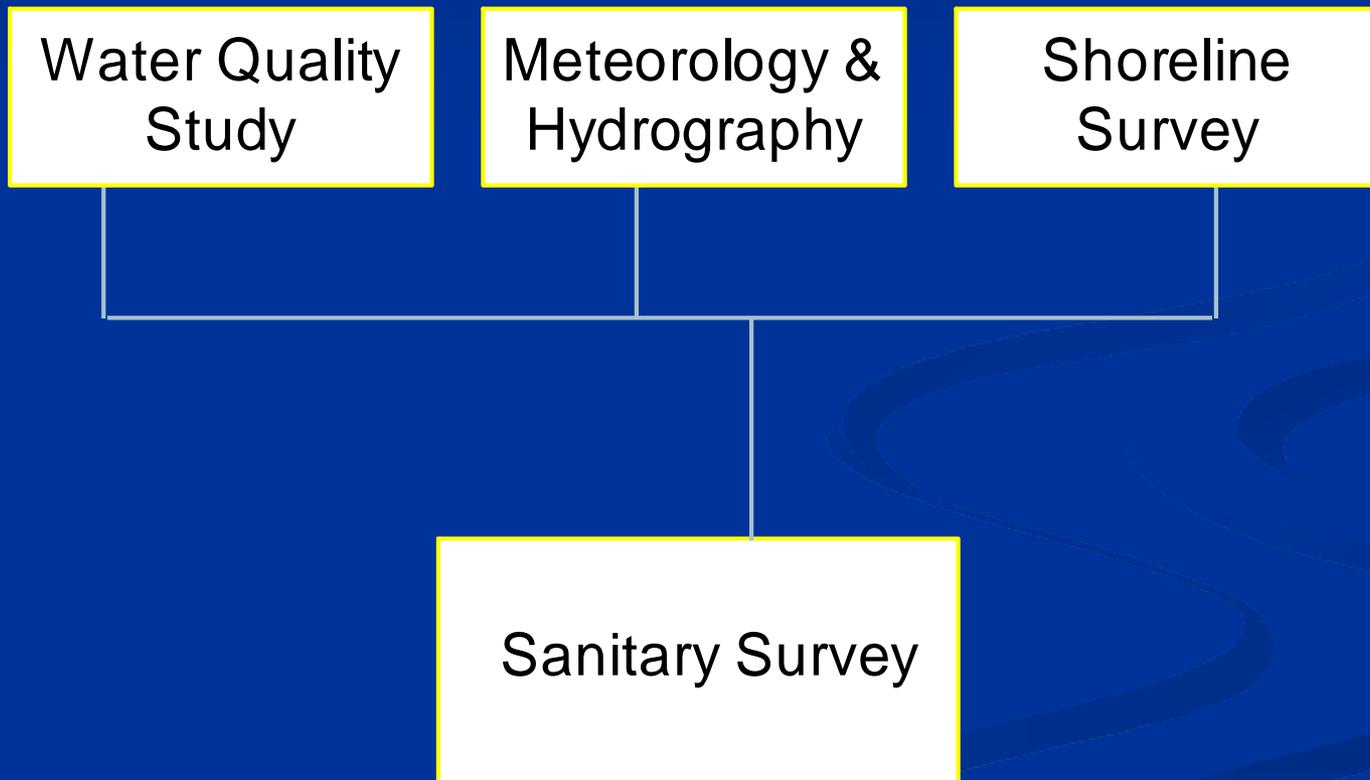


# Commercial Shellfish Growing Area Classification & Current Status

# Growing Area Information

- ❖ 97 commercial shellfish growing areas in Washington.
- ❖ Regulations handed down through FDA to States via “Model Ordinance”. Adopted via WAC.
- ❖ Classified with Sanitary Survey report.

# Classification of Growing Areas



# Water Quality Study

- ❖ Marine stations placed near potential upland pollution sources
- ❖ Sample each station 6 – 12 time per year
- ❖ A minimum of 30 samples per station used for calculation
- ❖ Fecal coliform (FC) standard is stringent
  - $\leq 14$  FC / 100 ml geometric mean
  - $\leq 43$  FC – 90th percentile value



# Shoreline Survey

The identification and evaluation of all actual and potential impacts to shellfish growing areas.



# The survey

The survey consists of evaluation of:

- ❖ All drainages and discharges
- ❖ Wildlife populations
- ❖ Agricultural activities
- ❖ Shoreline on-site sewage systems
- ❖ Industrial activities
- ❖ All other “potential impacts” to the growing area

# Other Shoreline Information

In addition to the shoreline evaluation, we evaluate:

- ❖ Wastewater Treatment Plants and Outfalls

- ❖ Marinas



# Meteorology & Hydrography

- ❖ Rainfall
- ❖ Tides
- ❖ Currents
- ❖ Dye and Drogue studies

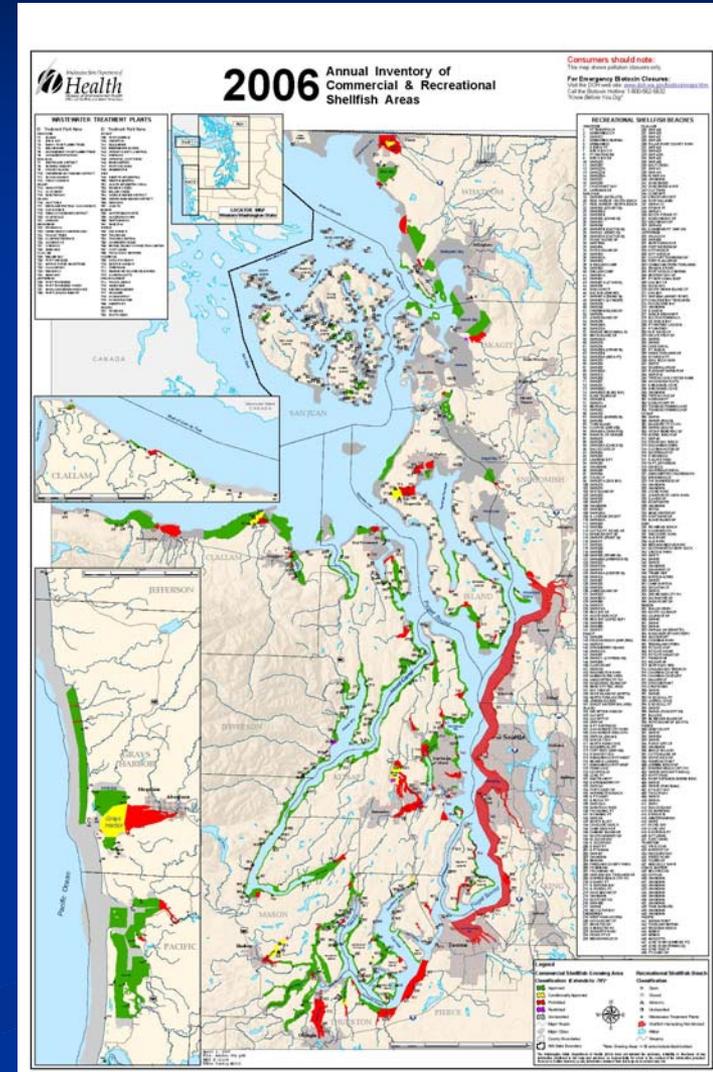
# The Classification Report

## The “Sanitary Survey”

- ❖ A report describing water quality conditions in the growing area.
- ❖ Attempts to bring marine water quality data and shoreline pollution sources together via meteorology and hydrography. Not always correlated!
- ❖ Assigns one or more classifications to the growing area.

# Growing Area Classifications

- ❖ **Approved**
  - *open, except emergencies*
- ❖ **Conditionally Approved**
  - *closed during pollution events*
- ❖ **Restricted**
  - *shellfish must be relayed*
- ❖ **Prohibited**
  - *closed to harvesting*
- ❖ **Unclassified**
  - *same as prohibited (Almost)*



# More Restrictive Classifications

18 - Conditionally Approved

9 - Restricted

107 - Prohibited

*134 restrictive classifications within 97 growing areas*

# Conditionally Approved Areas

8 - Seasonal Marinas

5 - Rainfall

3 - Wastewater Treatment Plants

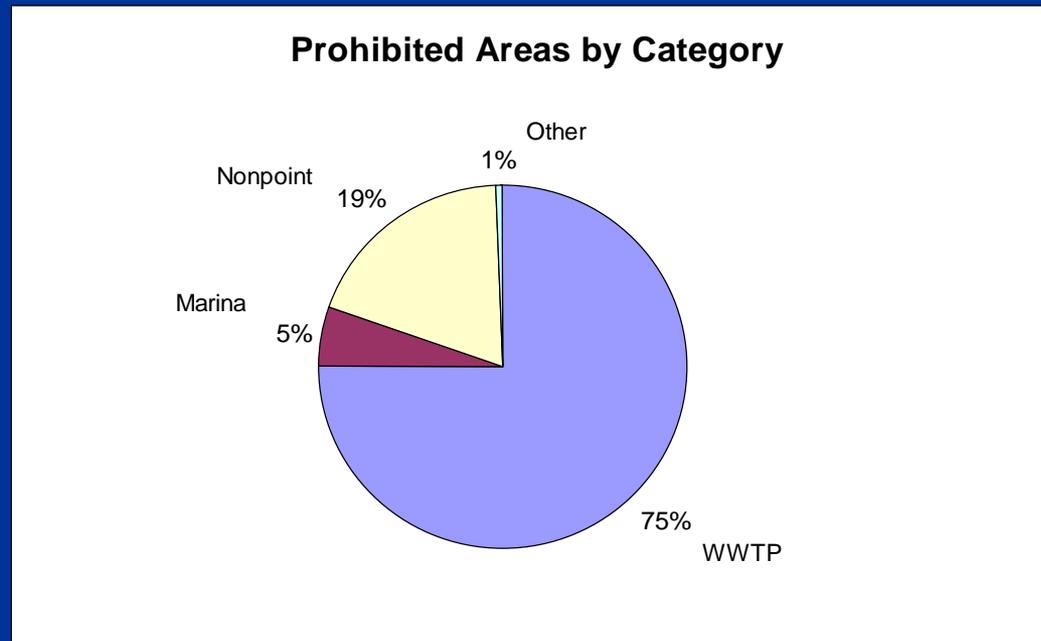
1 - Seasonal (River Conditions)

1 - Rainfall & Wastewater Treatment Plant

# Prohibited Areas

107 different Prohibited areas

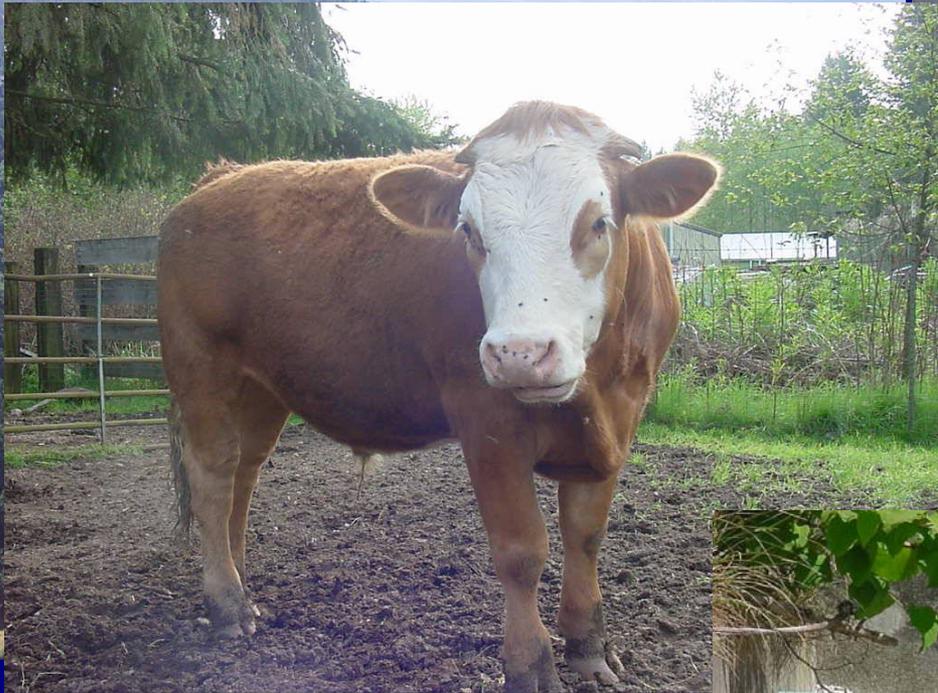
80% related to “potential” disruptions (2006 data).



# Where are water quality problems found?

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- ✓ Developed Shorelines
- ✓ Mouths of Rivers, Creeks, & Small Drainages
- ✓ Urbanized Areas with Impermeable Surfaces



✓ Natural & Cultural Sites

✓ Urban Bays with

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# Classification Changes

- ❖ Emergency Closures
- ❖ Annual Evaluations
- ❖ Triennial Evaluations
- ❖ Sanitary Survey Updates

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