Measure 2.1: Supplemental - Shellfish Acreage

MEASURE 2.1
SHELLFISH ACREAGE

Department of Health

Jerrod Davis, P.E.
Director, Office of Environmental Health & Safety

July 11, 2016
**Background:** Water quality trends improving, but many barriers need to be addressed

- Long term trends show improved water quality
- Large downgrades in Samish Bay and Portage Bay impact reaching the target

**Current State:** Success in improving water quality

- Partnerships lead to improved water quality
- Many successes over the years
Success: Quartermaster Harbor (King County)

- 180 acre upgrade
- Efforts by Public Health Seattle & King County and the Puyallup Tribe lead to success

Problem/Opportunity: Samish Bay (Skagit County)

- 2016 – Significant drop in number of confirmed pollution closures
- Recent restoration activities appear successful. These activities must be sustainable
- Number of river rise closures reduced due to environmental conditions over the last two years

<table>
<thead>
<tr>
<th>Year</th>
<th>Days Closed to Shellfish Harvest</th>
<th>Number of River Rises Above Flow Trigger</th>
<th>Number of Confirmed Pollution Closures (load &gt;4.7x10^{12} FC/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>37</td>
<td>16</td>
<td>10 (63% confirmed)</td>
</tr>
<tr>
<td>2013</td>
<td>31</td>
<td>14</td>
<td>8 (57% confirmed)</td>
</tr>
<tr>
<td>2014</td>
<td>27</td>
<td>15</td>
<td>9 (60% confirmed)</td>
</tr>
<tr>
<td>2015</td>
<td>13</td>
<td>4</td>
<td>3 (75% confirmed)</td>
</tr>
<tr>
<td>2016</td>
<td>7</td>
<td>5</td>
<td>1 (20% confirmed)</td>
</tr>
</tbody>
</table>
Problem/Opportunity: *Portage Bay (Whatcom County)*

- Downgrading 300 additional acres
- Progress is slow
- Current successes
  - Establish expanded MRA
  - Better field coordination
  - Investments

Current State: More systems are being inspected, and problems are getting fixed
**Problem/Opportunity:** Sustainable funding for septic management programs

- Proposed HB 1715 in the 2015 and 2016 legislative sessions
- Working with local boards of health to adopt septic fees
  - King County
  - Thurston County
  - Jefferson County

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**2.1.B / AG BMP**

Ron Shultz, Policy Director
Washington State Conservation Commission (SCC)

July 11, 2016
2.1.b. Increase the number of agricultural BMPs

**Background:** Implementing best practices to protect shellfish by reducing agricultural inputs.

### Agricultural activities can impact shellfish resources:
- Unmanaged runoff into streams inputs nutrients.
- Animal access to stream bank can lead to vegetation loss and erosion.
- Improper manure application to fields can lead to runoff.

#### Shellfish Agricultural BMPs

<table>
<thead>
<tr>
<th>Completed Agricultural BMPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>143 FY 14</td>
</tr>
<tr>
<td>169 FY 15</td>
</tr>
<tr>
<td>31 FY 16</td>
</tr>
</tbody>
</table>

**Current State:** CDs are assisting landowners to implement BMPs.

**Funding to implement BMPs:**
- 2013-15: $4.5 million
- 2015-17: $4 million

To date, 343 BMPs have been implemented in the 14 shellfish counties.

- Funding originally provided in response to Blue Ribbon Panel on Ocean Acidification (OA) recommendations.
- After legislative process, funding balanced between OA and shellfish closure.
- SCC staff recognized at the beginning the need to implement in a targeted approach.
- Since inception, funding requests had to meet OA or shellfish harvest criteria, be identified on maps, and linked to local coordinated activities.
**Problem/Oppportunity:** More targeted BMP implementation could lead to measurable resource improvements.

**Problem:**
- Number of BMPs implemented tells us the amount of work done, but not whether done in the right place.

**Solution:**
- Target BMP implementation to the areas with known resource concerns.

**Strategies:** Focus on resource concerns with targeted outreach and assistance.

**Targeted Outreach Approach:**
- Identify resource concern;
- Identify key parcels;
- Provide assistance;
- Assist funding practice.

**Identify Resource Concern:**
- Partner with resource agencies, local gov’t, tribes, NGOs.
- Data on water quality.

**Identify Key Parcels:**
- CDs conduct landowner outreach.
- Use assessment tools.

**Provide Assistance:**
- CD staff help landowners with options.
- Landowner develops plan.

**Assist Funding Practice:**
- Existing programs coordinated to focus fiscal resources.
2.1.b. Increase the number of agricultural BMPs

### Detailed Action Plan:

<table>
<thead>
<tr>
<th>Task</th>
<th>Task Lead</th>
<th>Partners</th>
<th>Expected Outcome</th>
<th>Status</th>
<th>Due Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify Resource Concerns – Identify pilot areas (2-3)</td>
<td>SCC</td>
<td>Shellfish Coordination Group (SCG); counties, CDs, tribes</td>
<td>Two or three geographic areas identified as pilot areas for implementation.</td>
<td>Dec 2016</td>
<td></td>
</tr>
<tr>
<td>Identify Resource Concerns – Data compiled to I.D. key resource concerns area.</td>
<td>SCC</td>
<td>SCG; counties, CDs, tribes</td>
<td>Key areas identified based on data reflecting resource parameters.</td>
<td>Dec 2016</td>
<td></td>
</tr>
<tr>
<td>Identify Key Parcels – Engage with CDs to develop parcel identification and outreach approach.</td>
<td>SCC</td>
<td>CDs, SCG</td>
<td>Standardized approach for parcel-based outreach is developed.</td>
<td>May 2017</td>
<td></td>
</tr>
<tr>
<td>Identify Key Parcels – Engage with CDs in pilot areas to implement parcel identification approach.</td>
<td>SCC</td>
<td>CDs, SCG, counties</td>
<td>CDs in pilot areas are engaged and are implementing the parcel-based outreach approach.</td>
<td>Sept 2017</td>
<td></td>
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</thead>
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<tr>
<td>Provide Assistance – CD staff in pilot areas are providing assistance to landowners.</td>
<td>SCC</td>
<td>CDs, SCG, counties</td>
<td>CDs have identified a list of key parcels and are engaging with landowners and tracking progress.</td>
<td>Sept 2017 – ongoing</td>
<td></td>
</tr>
<tr>
<td>Provide Assistance – Pilot program is expanded to other counties.</td>
<td>SCC</td>
<td>CDs, SCG, counties</td>
<td>Parcel outreach approach is expanded to at least 8 other counties.</td>
<td>July 2018 - ongoing</td>
<td></td>
</tr>
<tr>
<td>Assist Funding Practice – Funding for BMPs is coordinated in pilot counties.</td>
<td>SCC</td>
<td>SCG, federal agencies, counties, CDs, tribes</td>
<td>Coordination approach is developed and implemented in pilot counties.</td>
<td>Sept 2017 - ongoing</td>
<td></td>
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<td>Assist Funding Practice – Funding for BMPs is coordinated in other counties.</td>
<td>SCC</td>
<td>SCG, federal agencies, counties, CDs, tribes</td>
<td>Coordination approach is implemented in at least 8 other counties.</td>
<td>July 2018 - ongoing</td>
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</table>
Assistance Needed:

• Continued engagement of the Shellfish Coordination Group.
• Support from resource agencies to provide needed data for area identification.
• Additional funding for implementation. Re-purpose existing funds?
• Legislation to provide policy authority for the approach.

No Discharge Zone

• Taking the risk away from vessel sewage discharges to sensitive resources
• Preventable pollution source, pathogens – protect water quality and public health; estimate at least 500 acres of shellfish beds to be opened
• Follows other large investments in Puget Sound (sewage, stormwater, ag runoff, etc)
• More than 90 NDZs in 26 states, none in EPA Region 10
• 4.5 years of research, stakeholder outreach, modeling, 10 evaluation reports, draft petition – great support
• Delayed implementation for certain commercial vessels to spread retrofit costs; pumpout grants for commercial vessels
• Anticipate Final Petition Submission to EPA Region 10, summer 2016
Draft CAFO Permit

- Two Permits: Combined and State Only - Conditional authorization to discharge

- Increases environmental protection
  - Expands facilities covered by a permit
  - Requires adaptive management and soil sampling tying manure application to crop needs
  - Winter manure application restrictions

- Builds on existing frameworks and programs (RCW 90.64)
  - Dairy Nutrient Management Program

- Increases cross agency coordination for implementation
  - Ecology CWA authority
  - Agriculture statute and expertise industry
  - Works to streamline state government for implementation

- Adaptive Management key attribute in approach
  - No groundwater monitoring or lining of lagoons proposed in this permit
  - Lagoon assessment required in first two years to inform level of risk and therefore subsequent steps

Opportunities Moving Forward

- Advance Best Management Practices (BMPs) implementation to help manage animal waste
- Create sustainable local nonpoint pollution programs
- Regulate of boaters’ waste
- Sustain on-site sewage system management and repair programs
- Plan and manage wastewater treatment plant outfalls to Puget Sound
Memorandum of Agreement

- State partners respond together to threatened and failing marine water quality
- Assist local governments in organizing and implementing coordinated projects

Questions?