Washington State Ballast Water Program Annual Summary

Presentation to the Pacific Ballast Work Group Annual Meeting
Sacramento, California

March 29, 2016
Allen Pleus
Washington Department of Fish & Wildlife
Primary Purpose of BW/Biofouling Management

- **Federal**: “[T]o prevent unintentional introduction and dispersal of nonindigenous species into waters of the United States” and that “resolving the problems associated with aquatic nuisance species will require the participation and cooperation of the Federal Government and State governments.” (NANPCA 1990 §1002) [emphasis added]

- **State**: “WDFW’s AIS Program serves Washington’s citizens by protecting, restoring, and enhancing fish and wildlife and their habitats, while providing sustainable and wildlife-related recreational and commercial opportunities...by working to prevent the introduction of new AIS and controlling or eradicating established AIS populations.”
AIS Prevention Benefits

3,000 Miles Coastline
8,000 Lakes
70,000 Miles Rivers

Puget Sound & Lower Columbia River part of EPA National Estuary Programs - intent to protect and restore estuaries of national significance

Healthy Ecosystems

46 endangered, threatened, and sensitive wildlife species + 87 Candidates
AIS Prevention Benefits

Sustainable Fish & Wildlife Opportunities
AIS Prevention Benefits

Recreational Opportunities
AIS Prevention Benefits

Commercial Opportunities
Ballast Water Risks

- Viruses
- Phytoplankton
- Zooplankton
- Bacteria
- Larvae
Ballast Water Risks

- Ballast water invasive risks include a wide range of fresh to marine species that can:
  - Change ecosystems permanently - negating years and $Billions spent on sustainable fish, wildlife, and environmental recovery
  - Impact recreational and commercial economic resources on the scale of $Billions – on par or exceeding shipping industry economic values
  - Threaten human health and safety

- Ballast Water Exchange still most common BWM method

- Biological analysis of ballast tanks confirm BWE improvements over time, but must be eventually replaced by treatment to adequately protect state waters
Ballast Water Risks

- Biological analysis of ballast tanks shows some vessels cannot conduct effective BWE and should be prioritized for enhanced BWE practices or for installing treatment systems ahead of national schedules

- WDFW inspections show few AMS currently installed on vessels and only a small fraction being used – most crews don’t know if they meet implementation schedule, don’t have proper documentation, nor are trained on how to operate the systems
Ballast Water Risks

- No USCG type-certified BWMS available – thousands of extension letters being issued extending BWE & AMS use

- USCG acknowledge concerns with AMS type-approvals
  - 70% lacked any quality control
  - 50% lacked independent verification
  - 80% did not scale their tests for different volume capacities during their IMO type-approval processes

- No known USCG protocols/actions to mitigate or further assess AMS risks

- No data on USCG enforcement of VGP Pacific Nearshore Voyage requirements (50 mile BWE; NOBOB)
Program 2015-16 Activities Summary

- Adjustment to new USCG BWMR system – major issues
- Automated date entry (70% of BWRFs) – now obsolete
- Data backlog (20% remaining for 2015)
- Regional Pacific states coordination
  - OR STAIS, CSLC TAGs, WRP Coastal Com, HI AAOTF
- Federal VIDA legislation tracking
- Completion of BW Exchange Effectiveness report
- State/Federal BW/Biofouling gap analysis grant in progress
  (final report by June 1, 2016)
- 6-year BW/Biofouling strategic plans grant(s)
  (final reports by Dec. 31, 2016)
- No civil penalties issued (3 in 2014 totaling $22K)
Proposed new oil and coal terminals in Washington would significantly increase arrival and discharge volumes.
### 2014 Volume Vessel Discharge by Voyage Type in Millions of m³

<table>
<thead>
<tr>
<th>Ports/Voyage Type</th>
<th>Transoceanic</th>
<th>Coastal</th>
<th>Common Water</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td>11.86</td>
<td>2.66</td>
<td>3.44</td>
</tr>
<tr>
<td><strong>Puget Sound</strong></td>
<td>3.65</td>
<td>2.20</td>
<td>2.56</td>
</tr>
<tr>
<td><strong>Columbia River</strong></td>
<td>7.60</td>
<td>0.42</td>
<td>0.76</td>
</tr>
<tr>
<td><strong>Grays Harbor</strong></td>
<td>0.64</td>
<td>0.04</td>
<td>0.11</td>
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</tbody>
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\[
\text{Statewide} = 17.96 \\
\text{Puget Sound} = 8.41 \\
\text{Columbia River} = 8.78 \\
\text{Grays Harbor} = 0.79
\]

### 2014 Percent Vessel Discharge Volume by Voyage Type

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<th>Common Water</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statewide</strong></td>
<td>66%</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Puget Sound</strong></td>
<td>43%</td>
<td>26%</td>
<td>30%</td>
</tr>
<tr>
<td><strong>Columbia River</strong></td>
<td>87%</td>
<td>5%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Grays Harbor</strong></td>
<td>81%</td>
<td>5%</td>
<td>14%</td>
</tr>
</tbody>
</table>
2014 Ballast Water Arrivals/Discharge by Vessel Type

Percent Total Arrivals By Vessel Type

Percent Total Discharge Volume By Vessel Type
2008-2014 WA Reporting & Management Compliance: All

2016 Update: Recently discovered that numerous tug and line barge vessel types have been filing with NBIC, but not with state. Majority do not discharge and adding those to state’s BWMR filing waiver list. Data will be incorporated in future analysis.

21% = ~840 vessel arrivals

~4,000 vessel arrivals
2008-2014 WA Reporting & Management Compliance: Discharge Only

Discharge Only

% Compliance

2008 2009 2010 2011 2012 2013 2014

33% = ~490 vessel arrivals

~1,485 vessel arrivals

79%

67%

End Comp
Filed
Start Comp
Federal Vessel Incidental Discharge Act (VIDA)

• West Coast states consistently opposed to various versions of VIDA since started in 2005
• 2015 VIDA versions (S.373, HR.980, etc.) are poorly written with excessive scope – not fixable
• Back-door elimination of Clean Water Act provisions and long-standing state water quality protections
• Illusory “Savings Clause” as only applies to BW discharge standards at 10 year intervals – other incidental discharges are not covered (biofouling, graywater, copper-based paints, etc.)
Federal VIDA (cont.)

- Sullivan proposed SA.3170 VIDA amendment (2016) continues to escalate attacks against state sovereign authorities by adding new proposed repeal of Sec. 1205 of NANPCA (1990) – affecting any AIS management on any waters on any size vessel
  - SA.3170 proposed amendment to S.2012 Energy Policy Modernization Act
  - SA.3170 § 607 exempts all commercial, fishing, and recreational vessels
  - SA.3170 § 612 repeals Sec. 1205 of NANPCA

NANPCA

SEC. 1205. RELATIONSHIP TO OTHER LAWS.

All actions taken by Federal agencies in implementing the provisions of section 1202 shall be consistent with all applicable Federal, State, and local environmental laws. Nothing in this title shall affect the authority of any State or political subdivision thereof to adopt or enforce control measures for aquatic nuisance species, or diminish or affect the jurisdiction of any State over species of fish and wildlife. Compliance with the control and eradication measures of any State or political subdivision thereof regarding aquatic nuisance species shall not relieve any person of the obligation to comply with the provisions of this subtitle.

(16 U.S.C. 4725)
Federal VIDA (cont.)

- No competent scientific evidence has been introduced showing that federal regulation of ballast water and other vessel discharges adequately protects state or even national waters (last NBIC report in 2011 for 2006-07 data)

- No competent scientific evidence has been introduced showing that state regulation of ballast water and other vessel discharges is significantly affecting vessel operations/costs

- Most federal and federal/state inconsistencies could be fixed without new congressional legislation - MOAs between EPA and USCG similar to enforcement agreement, or between USCG and states as envisioned under NANPCA

- West coast states interested in working with federal agencies, industry, and interested parties to promote reasonable alternatives to VIDA
Thank you!

¿Questions?

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