

Washington Department of Fish and Wildlife

**AQUATIC INVASIVE SPECIES PROGRAM
FUNDING ADVISORY COMMITTEE
BRIEFING**

Presented to the
Fish & Wildlife Commission

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Briefing Outline

1. **Aquatic Invasive Species (AIS) & Ballast Water (BW) Program**
2. **AIS & BW Program Budget**
3. **AIS Funding Advisory Committee (FACT) Process**

AIS & BW Program Core Functions

- Prevention
- Early detection
- Rapid response
- Infested site management
- Local/regional coordination
- Education/outreach
- Enforcement



Zebra &
Quagga
Mussels



Ballast
Water



Tsunami
Debris



New Zealand
Mudsnails



African
Clawed
Frogs

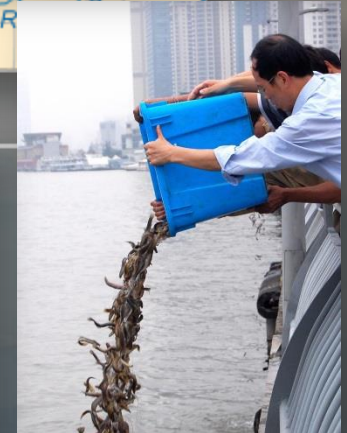
AIS Pathways



NUTRIA . . . NEWEST OPPORTUNITY

New fur-bearing animal now being bred in U.S. Offers huge profits to breeders. This fur is next to Mink NOW in price and will soon surpass it. 15 to 20 young per year. Most easily and economically raised animal known. 1 1/4¢ per day to feed. ANY CLIMATE, disease resistant. The Cabana Marrone strain is obtainable ONLY through Cabana Nutria, Inc. and its authorized dealers and distributors. For free booklet and address of Cabana ranch nearest you write:

CABANA NUTRIA, INC. Dept. 27
636 West Lemon Avenue, Arcadia, California



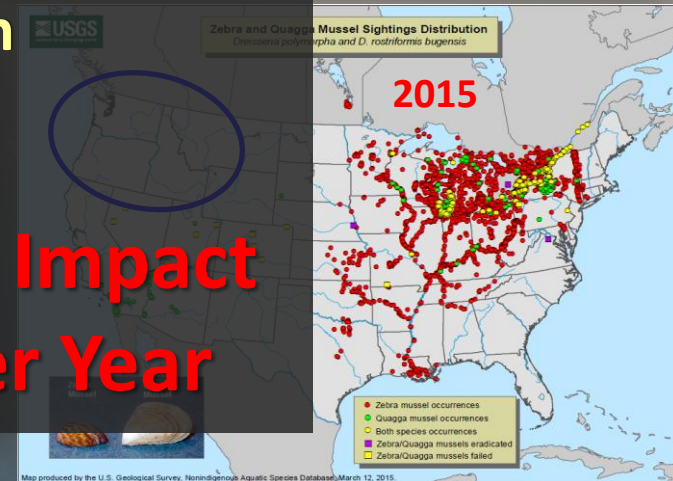
Zebra & Quagga Mussels



What's at Risk?

- Hydroelectric facilities
- Municipal water supplies
- Agriculture/irrigation
- Natural resources

**Estimated Economic Impact
100's of Millions Per Year**



African Clawed Frogs/Ranavirus



What's at Risk?

- 1st detection in Pacific Northwest
- Known to affect 72 amphibian species – up to 100% kill rate
- Crossover among amphibians, fish, reptiles
- Suspected to have caused die-offs in fish and reptiles worldwide



Japanese Tsunami Marine Debris



What's at Risk?

- Over 250 individual species identified
- Millions of individual species on some debris
- Many species are reproductive
- Species not found on earlier debris still arriving



All US/Canada = ~ 60 Total Boats
WA = 24 Total Boats
15 during Jan-Jun 2014

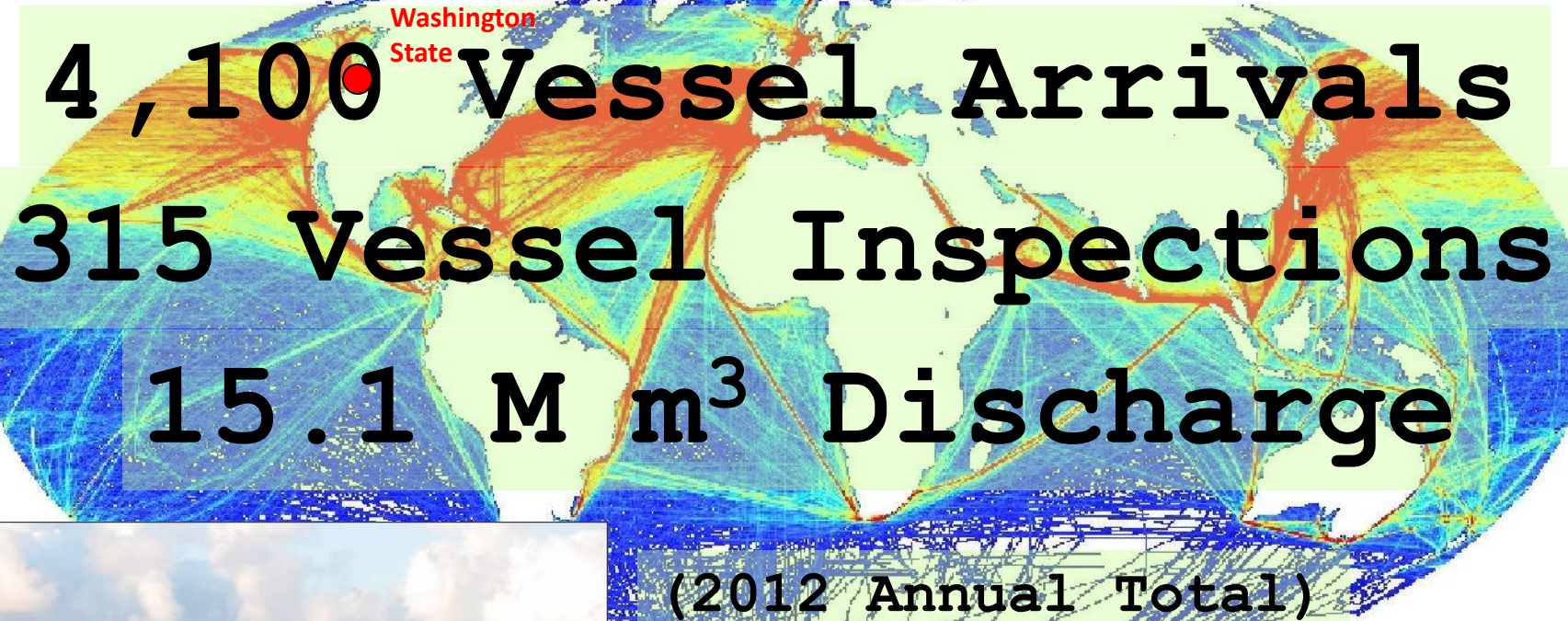


Ballast Water

Global Shipping Lanes

Key: Warmer colors =

More ships



Halpern et al. 2008



2013 Study on marine bioinvasions caused by global shipping identifies NW Pacific region as one of the four most endangered marine ecosystems in the world

Ballast Water



What's at Risk?

Bacteria

- Commercial & recreational shellfish
- Salmon recovery
- Rockfish recovery

- Harmful algae blooms
- Human health

Larvae



Viruses

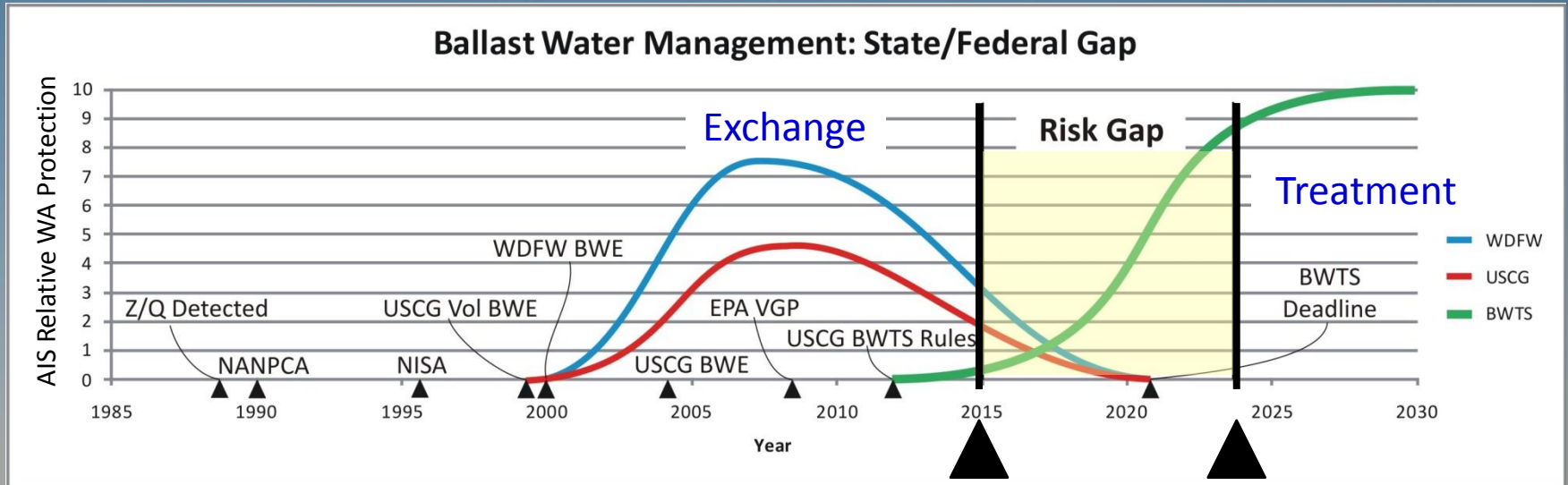


Phytoplankton



Zooplankton

BW Management Transition



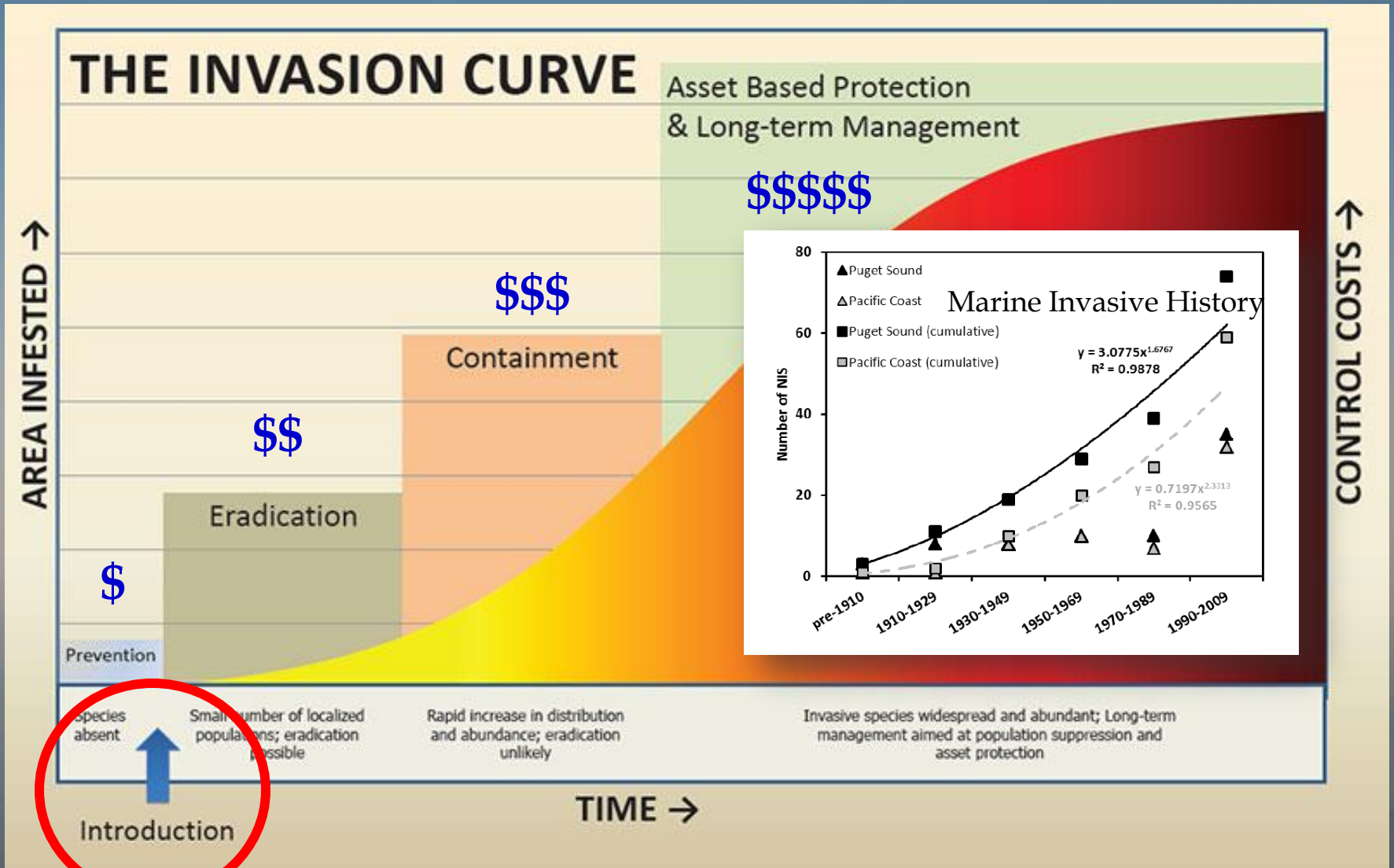
Exchange Risk Factors:

- WA Coastal Exchange Requirement
- USCG non-ballast water vessel inspection profile
- USCG deviation from voyage exemption

Treatment Risk Factors:

- Delayed USCG BWTS type approvals
- USCG non-ballast water vessel inspection profile
- No USCG inspection protocols
- No USCG biological sampling protocols

AIS Management

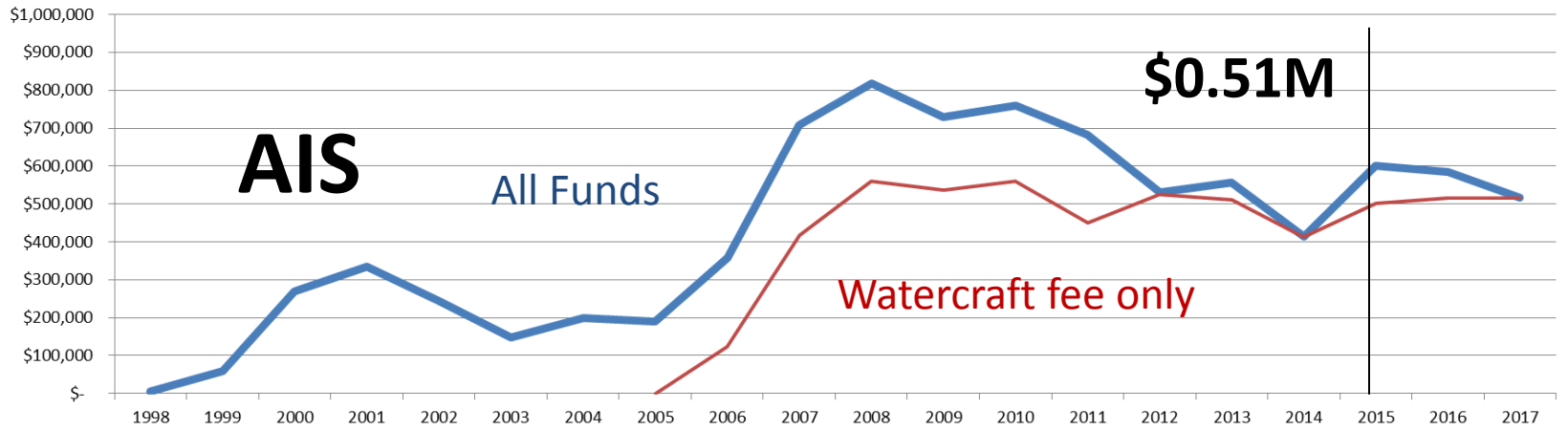


State Funding History

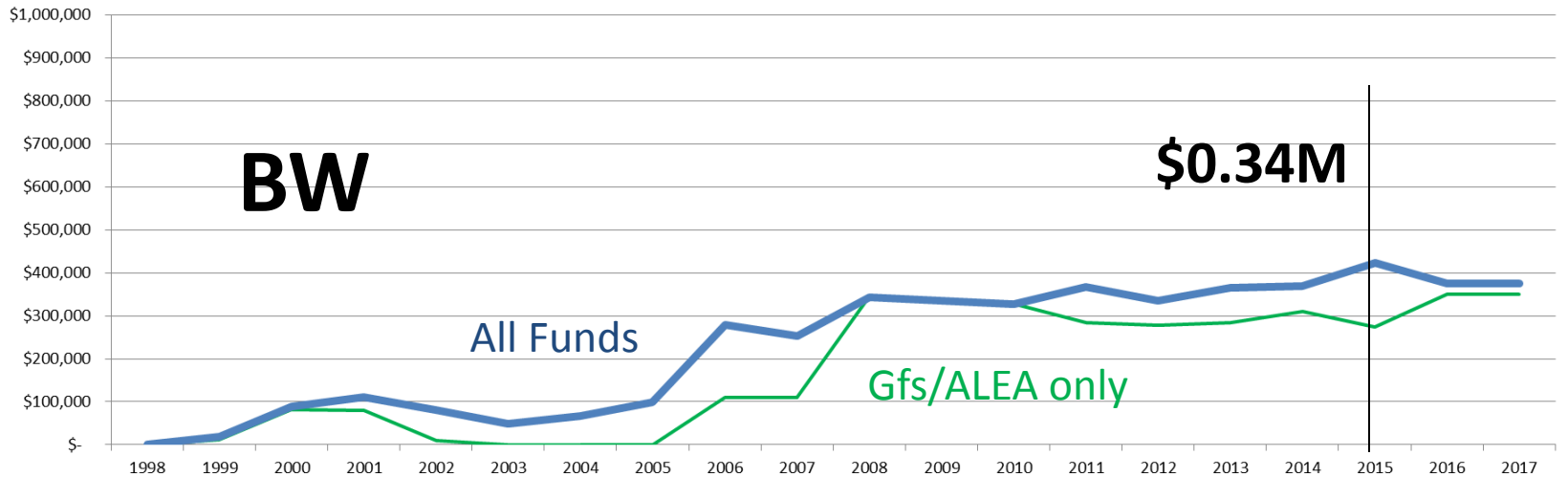
- ▣ **2005 legislative session**
 - \$0.53M/yr new AIS watercraft \$2 registration fee (passed)
 - \$0.11M/yr new AIS/BW general fund budget (passed)
- ▣ **2007 Legislative session**
 - \$0.23M/yr new BW general fund (now ALEA) budget (passed)
- ▣ **2014 legislative session:**
 - AIS statute rewrite (passed)
 - \$3.8M/yr new AIS funding request (removed)
- ▣ **2015 legislative session:**
 - \$1.1M/yr new AIS “phase 1” funding request (removed)
 - \$1.1M/yr new BW fee funding request (removed)
 - \$0.3M biennium bridge funding proviso (approved)

State Funding History

AIS Prevention and Enforcement Funding: Fiscal Years 1998 - 2017



Ballast Water Funding: Fiscal Years 1998 - 2017



The AIS Budget Problem

- ❑ Continuous slow decline of both federal and state funding
- ❑ Funding not keeping pace with AIS challenges
- ❑ Lagging behind other western states in zebra/quagga efforts
- ❑ Funding comes primarily from recreational boaters and ALEA
- ❑ Very limited early detection management capacity
- ❑ Very limited rapid response or infested site management capacity
- ❑ Very limited education/outreach capacity
- ❑ Lack of state resources promotes development of local management programs with fees

Regional Budget Comparisons

The estimated costs associated with failing to prevent an invasion of dreissenids in the Pacific Northwest exceed \$500,000,000 million annually.

State/Province	Annual Budget (\$millions)	Funding sources (2014)
Minnesota	\$ 10.30	Watercraft fees; NR fishing lic fee; state; trust fund; federal; local
Colorado	\$ 4.00	State; federal
California	\$ 2.93	State; watercraft fees; federal
Alberta	\$ 1.50	unk
California/Lake Tahoe	\$ 1.50	Federal; watercraft fees
Utah	\$ 1.35	State; federal
Idaho	\$ 1.25	Watercraft fees
Montana	\$ 1.14	State
British Columbia	\$ 0.81	unk
Wyoming	\$ 0.80	State; federal; watercraft fees
Nevada	\$ 0.70	Federal; watercraft fees
Oregon	\$ 0.54	Watercraft fees
Washington	\$ 0.42	Watercraft fees
Saskatchewan	\$ 0.27	unk

- Comparison factors?**
- Watercraft use
 - Recreational use
 - Fresh/marine waters
 - Unique water areas
 - AIS/pathway risks
 - Hydropower
 - Irrigation
 - Salmon recovery

Pacific/Great Lakes Comparisons

State/Province	Annual Budget (\$millions)	Funding sources (2014)
California	\$ 4.75	Shipping fee (\$850; also pays for biofouling/marine bio)
Washington	\$ 0.34	State; federal
Oregon	\$ 0.22	Shipping fee (@\$70 - going to \$88); state
Wisconsin	\$ 0.15	Permit fee (\$750 appl. + \$8,700 annual)
Hawaii	\$ 0.02	State
Minnesota	unk	Permit (\$1,240 appl. + \$345 arrival)
Michigan	unk	Permit fee (\$75 appl. + \$400 annual)
Alaska	N/A	(USCG only)
British Columbia	N/A	(Federal only)

- Comparison factors?**
- Number arrivals
 - Volume discharge
 - Number ports
 - Unique water areas
 - AIS/pathway risks
 - Shellfish industry risks
 - Puget Sound recovery

Funding Gap

- **AIS/BW combined program budget:**
 - Current - **\$0.85** million/year (\$0.51 AIS + \$0.34 BW)
 - Proposed - **\$5.20** million/year (\$3.1 AIS + \$1.0 AIS local grant program + \$1.1 BW)
- **Budget estimates based on:**
 - Moderate/proactive program
 - Prevention focus
 - Comparisons with other states in context of population, water resources, and environmental and economic risks

AIS FACt Process

- ▣ 2015 Legislature proviso - \$0.15M for Funding Advisory Committee (FACt)
- ▣ RCO directed to establish and coordinate FACt
- ▣ FACt formed with 15 members representing tribes, local governments, agriculture, hydropower, shellfish, recreational boating, shipping industry, public ports, and environmental groups
- ▣ First 2 of 4 planned meetings completed
- ▣ Considering an array of 36 options, including general funding sources and user fees
- ▣ Currently developing and ranking funding options

AIS FACt Process: Principles

- **FACt members identified following principles for assessing funding options:**
 - **Specific**
 - **Transparent**
 - **Efficient**
 - **Stable/reliable**
 - **Sufficient**
 - **Equitable**
 - **Minimize adverse consequences**
 - **Implementable**

AIS FAcT Process: Recommendations

- ❑ Last FAcT meeting by January 2016
- ❑ FAcT recommendations will be presented in a report to WDFW by February 2016
- ❑ WDFW will consider those recommendations as part of the agency 2017 budget request, along with results from Washington's Wild Future
- ❑ AIS FAcT members will help WDFW advocate for implementing recommendations

Questions?

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