

# DMMP Clarifications and Updates

Kelsey van der Elst, Corps  
Dredged Material Management Office



# 1) Tributyltin (TBT) Measurement Basis Clarification Paper

By

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and

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# TBT Measurement Basis

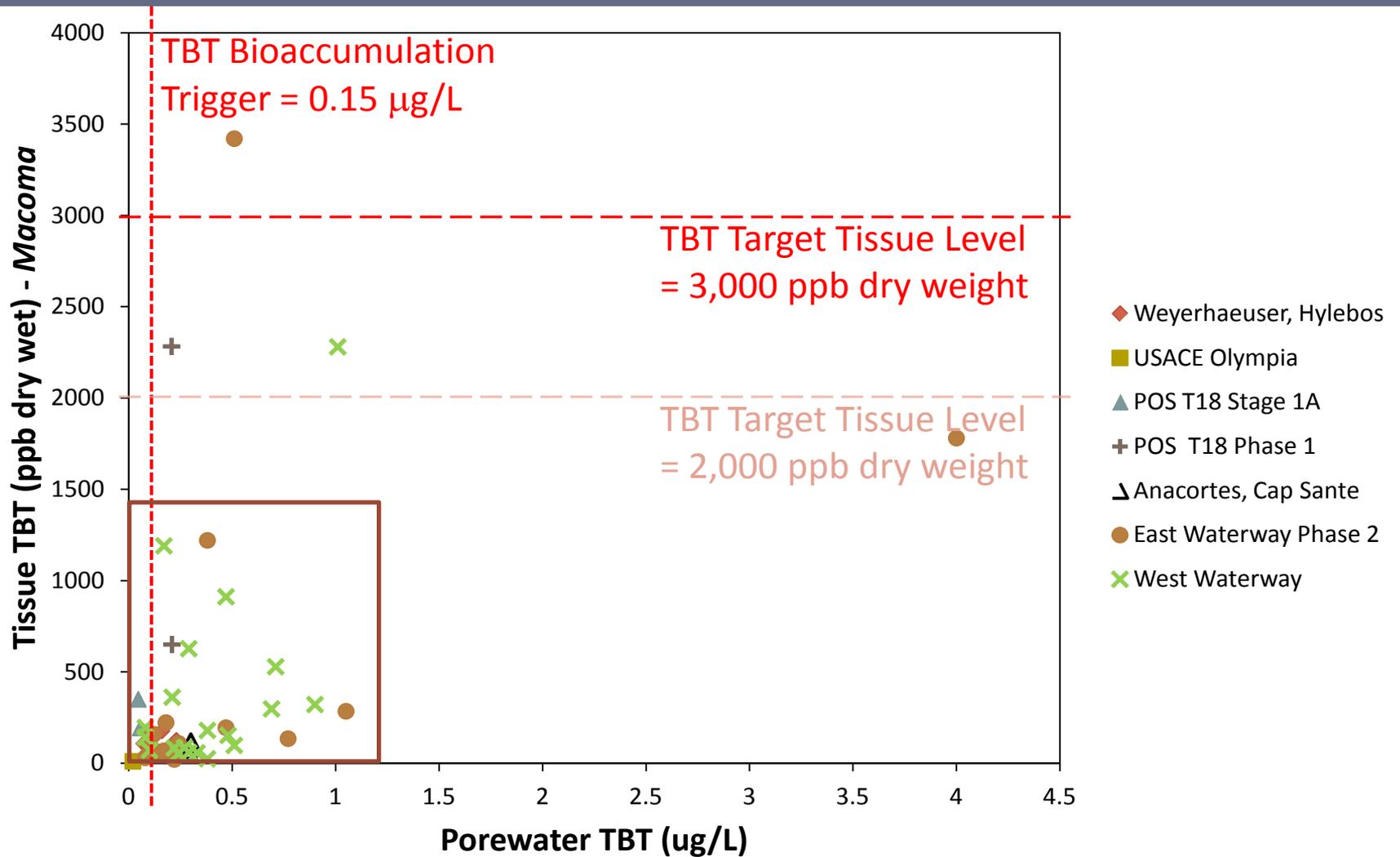
## Current DMMP standard

- Porewater TBT analysis

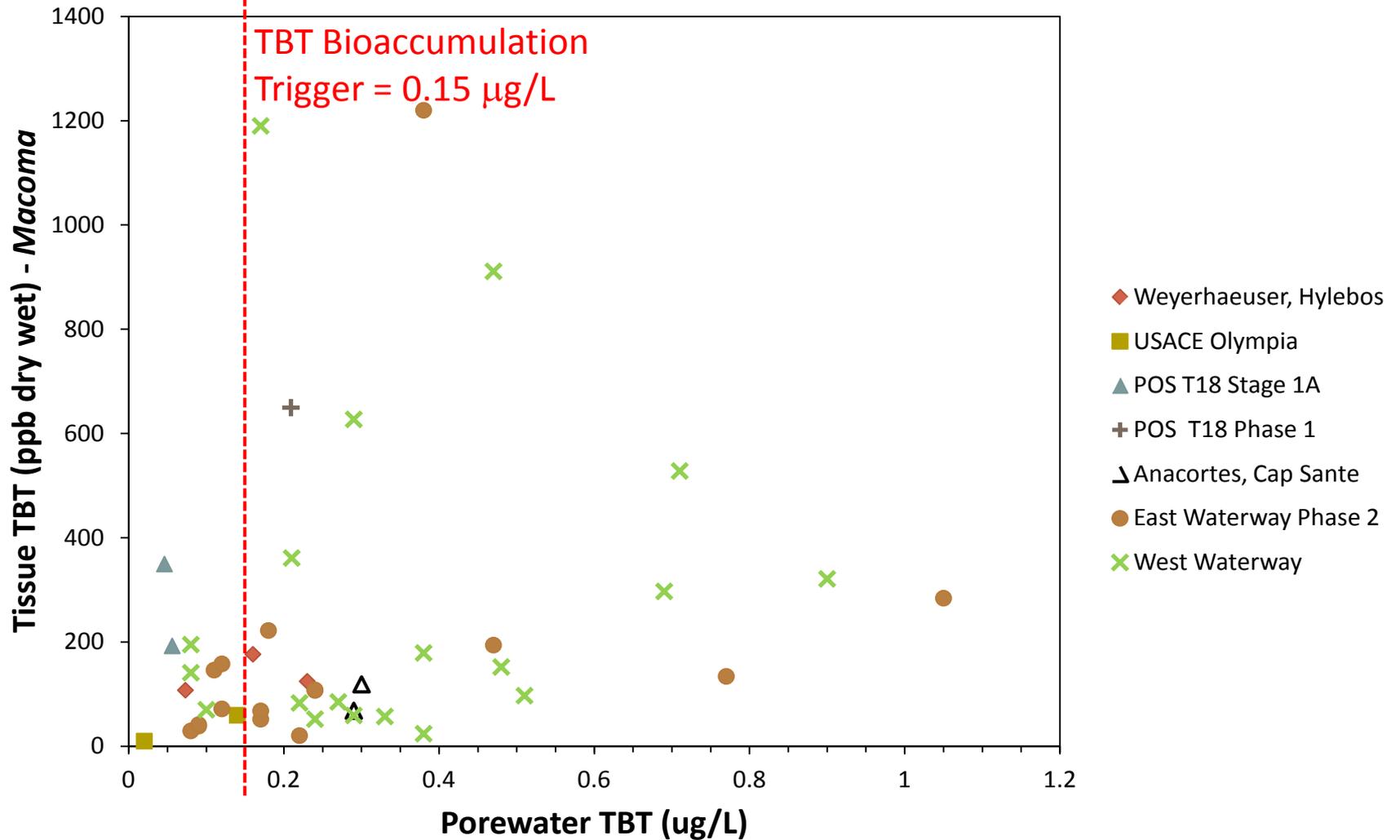
## Problems

- Holding time constraints
- Difficulty collecting sufficient porewater in sandy and consolidated samples
- Analytical challenges of TBT extraction and analysis
- No clear relationship between porewater TBT concentrations and tissue concentrations
- Inconsistent with freshwater standards

# TBT Measurement Basis



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# TBT Measurement Basis

## Proposed Clarification

- Bulk TBT analysis
- BT = 73  $\mu\text{g}/\text{kg}$

## Special cases

- Porewater TBT analysis will be considered on a case-by-case basis
- BT = 0.15  $\mu\text{g}/\text{L}$

## 2) Clarification Paper on Summations with U/J Flags

by Kelsey van der Elst, Corps

# Applying qualifiers to summed values

- Summed parameters include:
  - PAHs
    - Total LPAHs
    - Total HPAHs
    - Total PAHs
  - Total Chlordanes
  - Total PCBs
  - Total DDT
  - Total Benzofluoranthenes

When all constituents are non-detect (U-flagged)

Sum is reported as the highest non-detect value and U-flagged

Chemical	Result	VQ
4,4' DDD	4.3	U
4,4' DDE	2.7	U
4,4' DDT	1.8	U
<b>Total DDT</b>	<b>4.3</b>	<b>U</b>

# Applying qualifiers to summed values with mixed U/J qualifiers

When all constituents are detected and any number are J-flagged

Sum is J-flagged

Chemical	Result	VQ
4,4' DDD	4.3	J
4,4' DDE	2.7	
4,4' DDT	1.8	J
<b>Total DDT</b>	<b>8.8</b>	<b>J</b>

When some constituents are non-detect (U-flagged) and the rest are detected or J-flagged

Sum is J-flagged and the non-detect values are not included

Chemical	Result	VQ
4,4' DDD	4.3	J
4,4' DDE	2.7	
4,4' DDT	1.8	U
<b>Total DDT</b>	<b>7</b>	<b>J</b>

## 3) EIM Update

All projects are required to submit project data in EIM format to DMMO

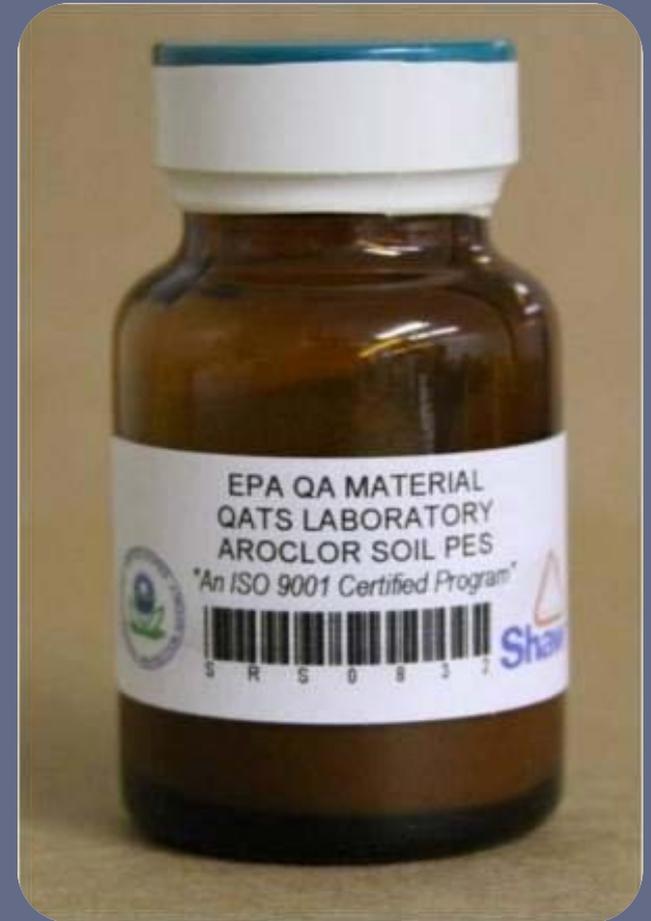
DMMP-specific instructions on entering project data in EIM spreadsheets are available from DMMO

- Please ask for most recent version!

## 4) Puget Sound SRM Update

## 4) SRM Update

- Updated request form on DMMP website
  - Include which analyses will be conducted
  - Be sure project name is **unique** and **consistent** with project name used on laboratory CoC forms and data reports



## 4) SRM Update

DY	Bottles Requested	# of Projects	Projects from	Data received
2012	5	3	1 DMMP 1 EPA 1 Ecology	2/3
2013	38	21	11 DMMP 3 EPA 7 Ecology	13/21
2014	15	10	7 DMMP 1 EPA 2 Ecology	3/10
2015	30	22	24 DMMP 3 EPA 3 Ecology	8/22

## 4) SRM Update

- Required PS-SRM data deliverables:
  1. Electronic data
    - ARI: ask for SRM EDD when requesting cost estimate
    - Other labs: DMMO will work with them to produce acceptable EDD
  2. Data validation report for SRM
    - Stage 2B required, Stage IV recommended
  3. SRM sample data report
    - Required items are listed in SRM guidance document
      - ❖ As appendix to sediment characterization report preferred

5) Update on status of  
PAH/cPAH guidelines under  
DMMP

# 5) PAH/cPAH Status Update

## cPAHs

- Not currently on COC list
- Cannot accept cleanup material above regional background at any DMMP disposal site
- Will be addressed as part of the PAH work

## PAHs

- In the process of developing guidelines for PAHs that will be consistent with state standards

# 6) Aquatic invasive species

- SAPs must document check for presence of New Zealand Mud Snail in project area



# http://www.ecy.wa.gov/programs/eap/ InvasiveSpecies/AISPublicVersion.html

DEPARTMENT OF ECOLOGY  
State of Washington

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Ecology home > Environmental Assessment > Minimizing Invasive Species

## Invasive Species

### Minimizing the spread of invasive species through field work

Washington law ([RCW 77.15.290](#)) prohibits the transportation of fish, wildlife, or aquatic plants from one location to another. ([RCW 77.08.010](#)) defines "wildlife" as all species of the animal kingdom whose members exist in Washington in a wild state.) The Washington Administrative Code also prohibits transporting certain terrestrial plants ([WAC Chapter 16-752](#)). This webpage provides information to help people who work in the field obey the law. Following the procedures described here will also reduce the risk of spreading things like fish disease-causing bacteria. These procedures will not eliminate all risk of spreading invasive species; they are an attempt to balance risk and cost.

Environmental Assessment Program staff are required to document their procedures. These requirements and other information specific to EAP staff are maintained on our internal web site.

#### Procedures

We have divided Washington into areas of "moderate" concern and areas of "extreme" concern. Areas of Extreme Concern have, or may have, invasive species like New Zealand mud snails that are particularly hard to clean off of equipment and are especially disruptive to native ecological communities.

Areas of extreme concern include the Snake River; Columbia River below the Hanford Reach area; Burnt Bridge Creek and Vancouver Lake; watersheds of the lower tributaries to the Columbia; Surfside canals; Capitol Lake; the Chehalis River below Blue Slough; Union Slough at the mouth of the Snohomish River; a tributary to the Naselle River; and the following creeks that flow into Lake Washington: Thornton Creek, McAleer Creek, May Creek, and Kelsey Creek (including tributaries to these creeks). These areas are shown on the maps below.

- Statewide
  - Statewide regions of extreme concern [JPG](#) ([GIS layer](#))
  - Closeup of Thornton and McAleer Creeks [JPG](#)
  - Closeup of Kelsey Creek and tributaries (Bellevue) ([Map](#) [JPG](#))
  - Closeup of Lower Columbia
    - Lower Columbia regions of extreme concern [JPG](#) ([GIS layer](#))

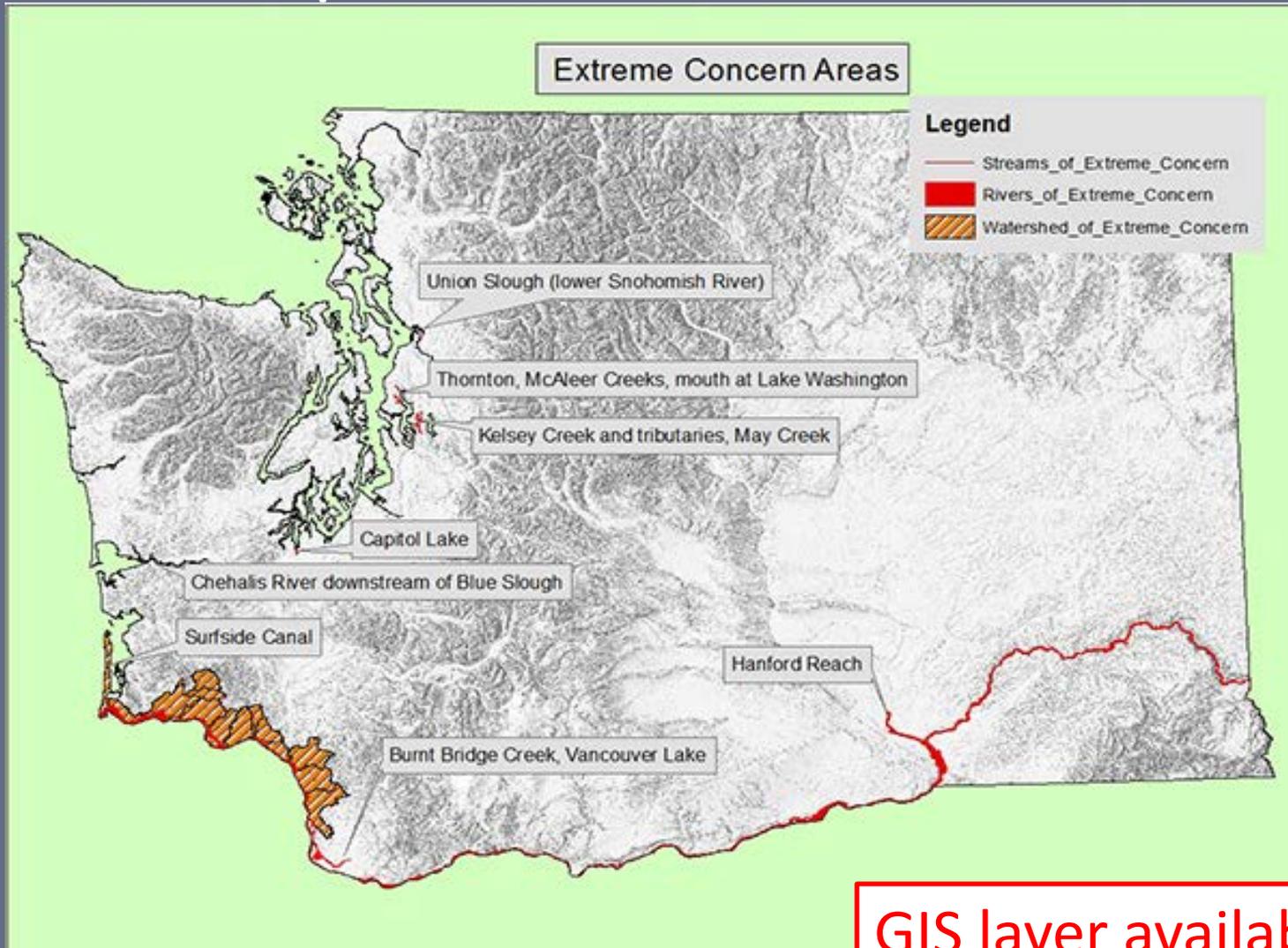
We have developed a common standard operating procedure (SOP) for the two types of areas. For areas of Moderate Concern the SOP focuses on visual inspection and physical removal (*with the exception of felt-soled waders*). For areas of Extreme Concern, the SOP requires decontamination under certain circumstances, primarily because the invasive species found in these areas are small and difficult to remove through visual inspection alone.

- [Two-page summary plus map](#) (PDF)
- [Decontamination Flowchart](#) (PDF)
- [Standard Operating Procedure \(SOP\) for Minimizing the Spread of Invasive Species in Field Work](#) (PDF)

Click for video.



<http://www.ecy.wa.gov/programs/eap/InvasiveSpecies/AISPublicVersion.html>



GIS layer available

Deadline for comments:  
June 6<sup>th</sup>, 2015

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