

# CHEMICAL USE IN BOAT DECONTAMINATION

Leah Elwell – Invasive Species Action Network



Uniform Minimum Protocols and Standards for Watercraft  
Inspection and Decontamination Programs for Dreissenid Mussels  
in the Western United States

UMPS III

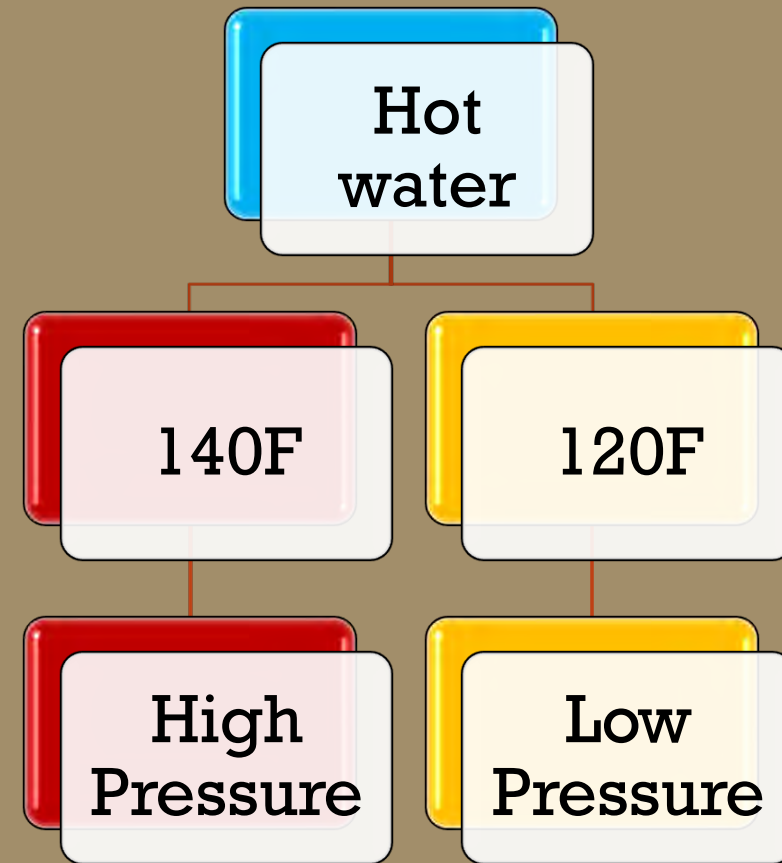


Editors  
Leah Elwell and Stephen Phillips



# UMPS III 2016

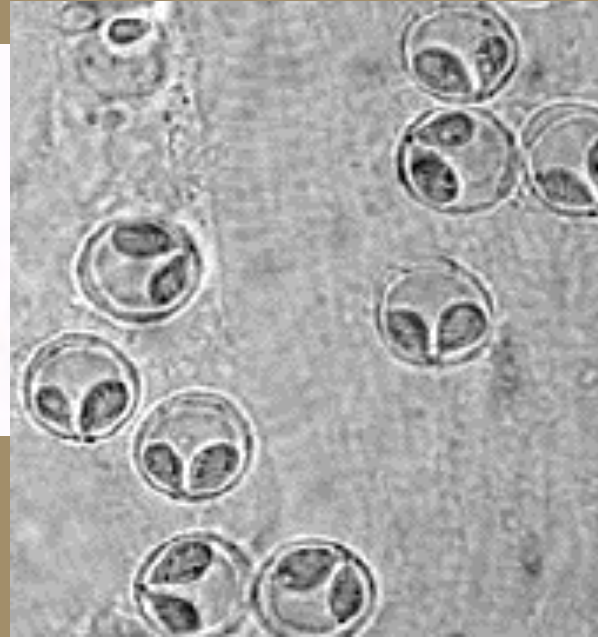








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**40 TABLETS**

NET WT 5.64 OZ. (160g)

**KEEP OUT OF REACH OF CHILDREN. DANGER:** EYE IRRITANT.  
HARMFUL IF SWALLOWED OR PUT IN MOUTH. See caution statement on side panel.

#### HOW AND WHERE TO USE.

**CAP INSTRUCTIONS:** TO REMOVE CAP: Place bottle on a firm surface. Push cap down and turn counter-clockwise. TO REPLACE CAP: Push cap down and turn clockwise.

**CAUTION:** Wash hands after use with soap & water.

**FLOORS, TILES, BATHTUBS, SHOWERS, KITCHEN SINKS, GARBAGE CANS.** To clean, deodorize and remove mildew stains: Add 1 TABLET to 1 gallon of water. For heavily soiled areas use 2 TABLETS. Mop or wipe with bleach solution. Allow solution to contact surface for 5-10 minutes. Rinse well and air dry. Use gloves for prolonged use.

**TOILETS:** To clean & deodorize. Add 1 TABLET into the toilet bowl. Allow to dissolve, then use brush to clean. Flush toilet before use.

Do not use on any metals or metal surfaces, enamel bathtubs, fine wood surfaces, wool and silk fabrics, man-made, colored or any fabric with a special finish. Test on inconspicuous area prior to use.

**LAUNDRY:** White and Colorfast Bleaching.

Use a detergent. Then add tablets.

**HE Machines. Regular Load:** Add 1 TABLET into the washer then add clothes, or add 1 TABLET to washing machine dispenser, then add 3/4 cup of water to submerge tablet to start dissolving process. Close dispenser and start wash cycle.

**Standard Machines:** Regular Load: Begin filling the washer with water. Add 1 TABLET into the water. Allow to dissolve for 1-2 minutes. Place clothes in washer and start wash cycle.

For extra whitening power use 2 Tablets per regular load. For Extra large loads or heavily soiled stained clothing use 3 Tablets.

**STORAGE/DISPOSAL:** Keep container closed tightly and store in a cool dry place. Keep at temperature not exceeding 120°F. Do not reuse empty bottle. Discard in trash or offer for recycling.

**ALWAYS KEEP CHEMICALS AND BLEACH TABLETS OUT OF THE REACH OF CHILDREN.**

**AVOID CONTACT WITH EYES.** Keep away from food, drink and animal feeding areas. **AVOID BREATHING VAPORS.** Use in well-ventilated areas.

**FIRST AID. IF SWALLOWED:** Do not induce vomiting. Drink 2 glassfuls of water. Do not give anything by mouth to an unconscious person. Call a Poison Control Center or doctor immediately for treatment advice. Have product container or label available when seeking medical advice.

**IRRITATING TO EYES AND RESPIRATORY SYSTEM.**

**DANGER:** Corrosive to eyes if not flushed immediately with water. If irritation occurs or persists contact a doctor for immediate attention. Contact with skin. Wash hands thoroughly after each use. If irritation occurs seek medical advice.

In case of respiratory concerns, remove to fresh air. If breathing is affected seek prompt medical attention.

**WARNING: OXIDIZER.** Do not use or mix this product with other household chemicals such as ammonia, toilet bowl cleaners, rust removers or acid, as this releases hazardous gases.

**Contains:** organic chlorinated bleaching agents, sodium bicarbonate, inert fillers, chlorine stabilizers.

# GOAL

- improve knowledge on chemical use in boat decontamination
  - Compile information about the efficacy of chemicals
  - Determine legal or appropriate use
  - Suggestions
  - Correct misinformation in a methodical fashion







# FEDERAL LAWS GUIDE USE

- **Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)** -  
Requires all pesticides sold or distributed in the United States to be registered by EPA.

The **Pesticide Registration Improvement Act of 2003/2007 (PRIA)** (amended FIFRA) Under PRIA Companies must pay service fees according to the category of the registration action.



# LABELING AND ENFORCEMENT

- provide clear directions for effective product performance while minimizing risks to human health and the environment.
- It is a violation of federal law to use a pesticide in a manner inconsistent with its labeling.
- states have primary authority for compliance monitoring and enforcing against illegal pesticide use.



# ENVIRONMENTAL PROTECTION AGENCY GUIDANCE

- The use of chemicals by private individuals is legal; however there may be nuance in a management agency making a recommendation to the public





# A METHOD TO ADDRESS CHEMICAL RECOMENDATIONS

## Chemical Treatment

Many chemical agents are available to prevent the potential movement of invasive species. However, the use of chemical treatments sometimes poses disposal and wastewater concerns. If chemical treatments are used, local standards of waste disposal must be followed. Since local regulations for chemical disposal may vary, always contact a local chemical waste management facility, the Environmental Protection Agency, or refer to the Material Safety Data Sheet for recommendations on proper disposal prior to use of any chemical. Some state states may also require certification or licensing for personnel who use chemical treatments. Finally, some solutions may cause corrosion on metal surfaces and electrical connections; thus be sure to follow all label restrictions and manufacturer guidelines. Following treatment, rinse all surfaces with clean water and dry thoroughly.

To prevent the spread of invasive species, all equipment should be inspected and cleaned after exiting the water body.

Diluted household bleach solution provides an inexpensive, effective way to control invasive species. Soak or spray equipment for at least one minute with a two percent bleach solution (three ounces of household bleach mixed with one gallon of water). If invasive pathogens or diseases are suspected, a 10 percent solution should be used (10 ounces of household bleach mixed with one gallon of water). Bleach is an extremely effective disinfection agent, but it is a caustic substance that can be corrosive to aluminum and other sensitive fishing and boating equipment.

Of the materials traditionally used to disinfect for human or animal health purposes, quaternary ammonium compounds have been found to be effective in controlling viruses and pathogens. Commercial formulations, such as Parvasol® and Kennelsol®, are available through laboratory or veterinary supply companies. Household cleansers/disinfectants, such as Formula 409® and Fantastik® that contain the quaternary ammonium compound alkyl dimethyl benzyl ammonium chloride can also be used to disinfect equipment. These solutions can be used at full strength as a spray, or diluted for soaking with two parts water to one part disinfectant. For all materials, follow the instructions and be sure to soak equipment for a minimum of 10 minutes. Be sure to dispose of materials away from surface waters in accordance with label restrictions.

Other common chemical decontamination methods are:

- Undiluted white vinegar for 20 minutes.
- 1% potassium permanganate solution at 24-hour exposure.
- 5% quaternary ammonium solution for 10 minutes.
- 250 mg/L ROCCAL (benzalkonium chloride) for 15 minutes
- 500 mg/L hydrogen peroxide for 60 minutes
- 167 mg/L formalin for 60 minutes



# **2017 PAPER COMPLETION**

**2017 - 2018  
Online/Publication Correction**



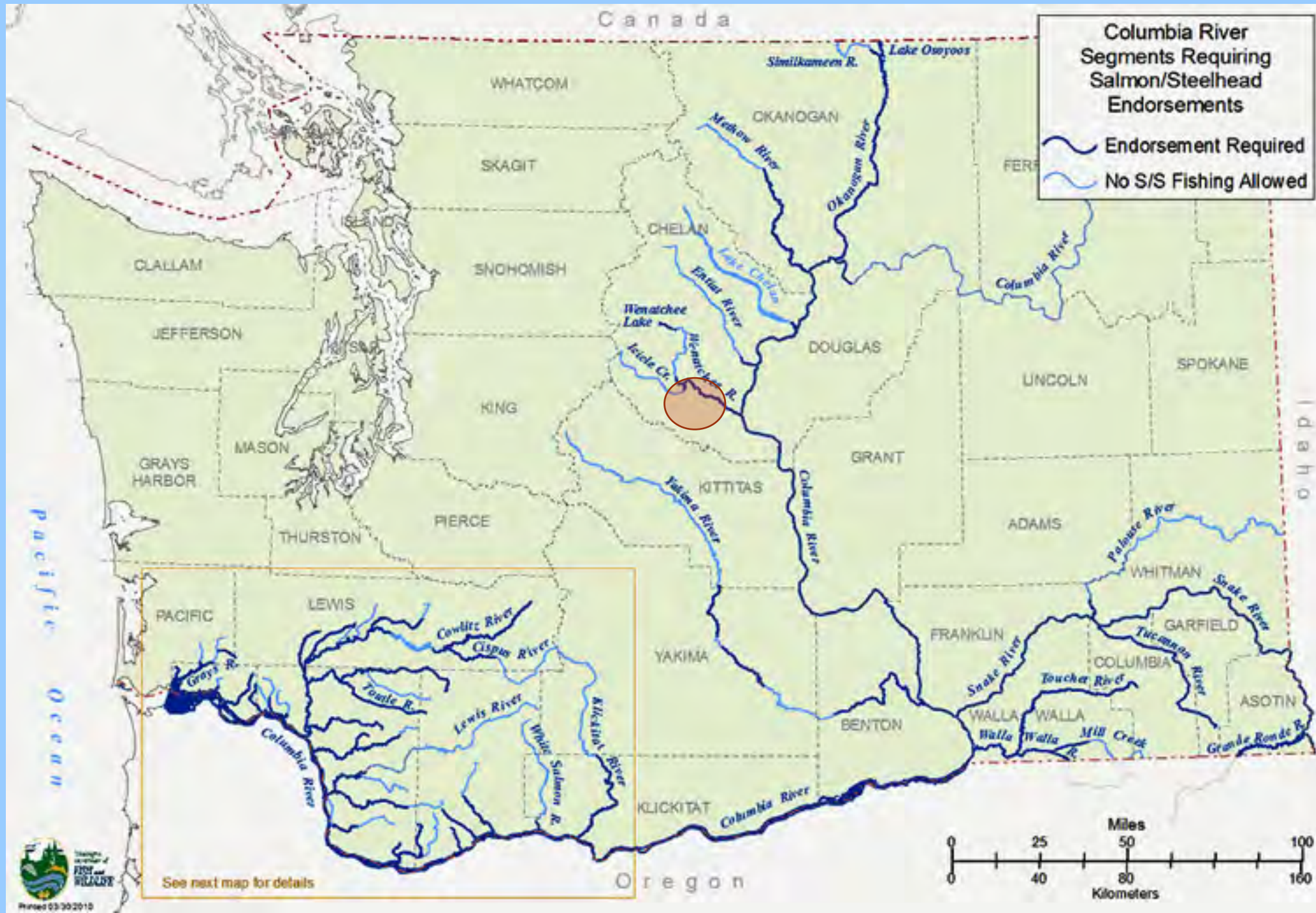




# WASHINGTON RAPID RESPONSE

- Wenatchee, WA
- October 3-5, 2017

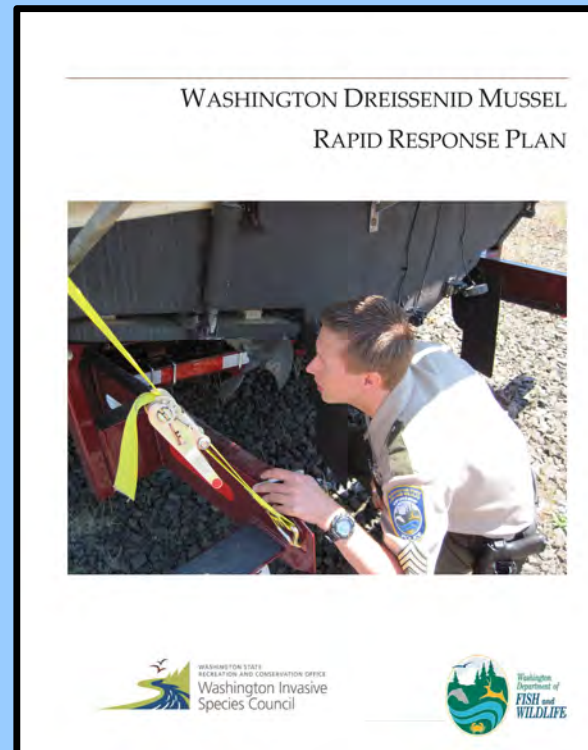






# RAPID RESPONSE PLANNING

- Rapid Response Planning Document



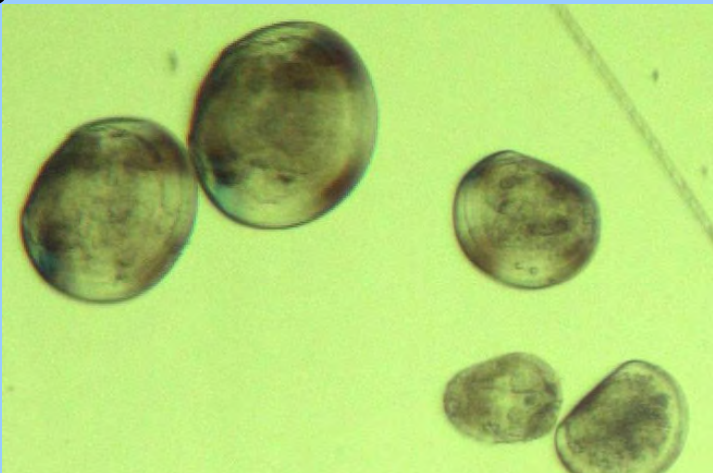
- Exercise Participation
  - Vancouver, WA 2007
  - Lake Roosevelt/Spokane, WA 2010





# PLANNING TEAM AND SCENARIO

- WA Dept of Fish and Wildlife
- WA Invasive Species Council
- Chelan Public Utility District
- Region 1 USFWS
- PSMFC
- Site for exercise: Columbia River
- Adults or veligers TBD



# WRP ANNUAL MEETING

- San Diego
- September 13-15, 2017
- Horton Hotel
- [www.fws.gov/answest/](http://www.fws.gov/answest/)



# SAN DIEGO AGENDA

- California Focused Session
- Coastal Focused Session
- Dreissenid Focused Session
- Field Trip to San Diego Port and Tijuana River National Estuarine Research Reserve





# WRP WEBSITE – MECHANICS AND MAINTENANCE



**About Us** | **Meetings** | **Documents** | **Links** | **Contact Us**

**About Us**

- WRP
- Authorities
- Executive Committee
- Committees/Groups
- Membership
- Panel Coordinator

**Western Regional Panel**

The Western Regional Panel on Aquatic Nuisance Species was formed in 1997 to help limit the introduction, spread and impacts of aquatic nuisance species into the Western Region of North America. This panel of public and private entities was formed by a provision in the National Invasive Species Act of 1996 (P.L. 101-636), the amendment to the 1990 Act. The spread of nonindigenous aquatic species is causing significant economic and ecological problems throughout North America. Invasive, non-native species are one of the leading threats to the ecological integrity of forests, grasslands, and waterways. Recognizing the threat to western aquatic ecosystems and water delivery systems caused by nuisance exotics has raised concerns with representatives from State, Provincial, and Federal agencies as well as Private water interests. The purpose of these pages is to provide an information network for the various interests involved with management of aquatic nuisance species as well as to educate the public.

*The public and private sectors working together to protect western water resources from aquatic nuisance species.*



*Western Region  
Area Covered by WRP*

**Annual Meeting 2017**  
[San Diego, CA](#)  
[September 13-15, 2017](#)

**Brochure**  
[Threats to the West](#)  
[Brochure](#) is now available.

**QZAP**  
The [Quagga/Zebra Mussel Action Plan](#) (QZAP) summarizes current strategies to address the invasion of zebra and quagga mussels in the West.

**Have you seen anything unusual?**  
If so, we want to hear from you.

An Aquatic Nuisance Species reporting system sponsored by the U.S. Geological Survey is available to [report ANS online](#), or may [call your state wildlife agency](#) directly for questions and reports.





**STOP AQUATIC  
HITCHHIKERS!**







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406-222-7270

