

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



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UMPS CAVEATS

- Living document subject to periodic and systematic updating
- “Minimum” protocols and standards, more restrictive options discretionary
- Recognizes the need for additional peer reviewed research on the effectiveness of currently recommended protocols and standards for watercraft decontamination (e.g., Wong)
- Addresses the wide range of “capacity” currently available to the many different implementing agencies/organizations
- Includes the contributions, comments and edits of more than 100 “experts”
- Major funding for this project provided by:



In Cooperation with:



Why Uniform Protocols and Standards?

- **Neither mussels nor boaters recognize jurisdictional boundaries**
- **Your program is only as good as your neighbors, we all need to encourage and support the implementation of the most effective region-wide interception strategies**
- **Increase effectiveness by everyone using the best available science and technology**
- **Build trust in and between programs in order to maximize efficiency and use of limited resources**
- **Make programs more consistent to reinforce the prevention message with boaters, the public, law makers and policy makers**
- **Make it easier for the boating public to understand, anticipate and comply with “clean boating” principles**
- **The Quagga Zebra Action Plan recognizes as one of its highest priority action items “the development of consistent inspection and decontamination protocols”**

Began with:
An On-line Survey of WIP Programs in 20 Western States
(Jan-Feb, 2009)

- Identified 72 programs in 20 western states (28 CA)
- 300+ waters
- At least one (sometimes minimal) program in each state
- On-line survey sent to all - 46 questions to define program parameters and gauge support for UMPS
- 96% return rate
- Programs range from spot-checks to full-meal deal
- Survey and Report now available:
<http://www.aquaticnuisance.org/wit/reports>

Some Interesting Survey Findings ...

- Total of 138 full-time, 110 part-time and over 300 seasonal FTE's
- 72% of programs received their training directly from WIT L1 (Bill Zook) or L2 Course (Wen Baldwin)
- 58% exclude all watercraft that are not clean, drained and dry
- 52% offer decontamination services, of those
- 54% also require a "drying" period following decontamination
- 52% certify watercraft, of those
- 54% use "banding" method of certification, many with paper receipt
- 60% do not accept another agency/organization certification (only 3% - unconditionally)

UMPS Report

Recommendations for:

- Program levels – Recognizes vast differences in individual entities “capacity” e.g. authority, resources, political and public support, etc.
- Protocols and Standards for:
 - Screening interviews – Standardize questions
 - Inspection – When, where and “how to” for various watercraft/equipment types and conditions
 - Decontamination – Equipment, protocols and standards
 - Quarantine – Calculations, options and qualifiers (ballast)
 - Exclusion – Last resort option where other, more user-friendly options, aren’t available
 - Certification - When, where, how and cross-jurisdictional coordination

Program Levels

Level 1 – Self Inspection Programs (mandatory/voluntary)

Low risk waters where implementation "capacity" is limited
Low cost foot in the door

Level 2 – Screening out high risk watercraft

Assures that no high risk watercraft are allowed to launch by screening-out all watercraft that are not clean, drained and dry
Screening interview and limited inspection but no comprehensive inspection or decontamination services provided

Level 3 – Comprehensive Interception Program

High risk waters and wherever possible; includes screening, inspection, decontamination, quarantine and possible certification

Uniform Minimum Protocols and Standards

- **Self Inspection**
- **Screening Interviews**
- **Watercraft/Equipment Inspection**
- **Watercraft/Equipment Decontamination**
- **Quarantine or Drying Time**
- **Exclusion**
- **Certification/Banding**

Watercraft/Equipment Inspection

- If you don't have specific authority, get owner/operators permission first
 - Adopt and use a checklist of watercraft parts/areas to guide inspection
 - Include trailer, propulsion system and accessories in the inspection
 - Be systematic; starting at point "A" and ending at point "B" to assure complete coverage
 - Use the inspection as an opportunity to educate the owner/operator
- Require decontamination, quarantine (combination) or exclude If attached mussels (dead or alive) , standing/trapped water or attached vegetation (including algae accumulation) are found
- Watercraft/equipment that have been successfully decontaminated or quarantined (dried) for the required time or that are clean, drained and dry and have not been launched in mussel positive waters/areas in the past 30 days should be allowed to launch

Watercraft/Equipment Decontamination

- Get the permission of the watercraft owner before doing decontamination away from the water where water and solids can be contained
- Strongly consider total containment/ treatment option – low cost systems available
- Be systematic and thorough including all parts/areas and accessories

Standards:

- Hot water pressure washer set to achieve 140 F at point of contact
- Maintain contact for at least 10 sec. (leading to trailing edge) on all exposed surfaces, 60 sec. contact time for hard to access areas; Min. 4 gpm at 3,000 psi
- Use pressure washer attachments for flushing sensitive areas and cooling system
- Drain then treat (hot water) all areas of standing, trapped, stored water (Ballast Tanks require special attention)
- Monitor temperatures carefully and often
- Consider adding period of quarantine/drying following decon – insurance policy

Quarantine/Drying

- *Time out of the water exposed to air temps leads to mussel desiccation*
 - *Varies depending on temperature and humidity - from 1-30 days*
 - *Higher the temps and lower the humidity the shorter the drying time and visa versa*
 - *Use 100th Meridian calculator or UMPS guideline*

Maximum daily temperature
Degrees Fahrenheit

Minimum days out of water

< 30	3
30- 40	28
40-60	21
60-80	14
80-100	7
>100	3

- **Mussel removal still required after drying!**
- **Quarantine/drying standard does not apply to watercraft with ballast tanks!**

Adoption of UMPS

How best to implement these protocols and standards to enhance state cooperation on inspections?

In September 2009 UMPS was adopted by the Western Regional Panel on Aquatic Nuisance Species, as a “best practices manual” and its use was encouraged for all agencies/organizations; not legally binding for the member agencies.

BUT it was never agreed upon how agencies conducting decontamination would/could formally adopt (MOA) and broadly promulgate these protocols and standards in the western United States....time and money issue, a 10 plus state agreement was seen as overly difficult

We know there is a need for cooperation amongst agencies and the need to formalize a process for accepting inspections and decontaminations from other jurisdictions -- to avoid duplicative inspections.....with additional inspection programs popping up in the west, the issue of multiple inspections is becoming a larger issue

Some agencies are informally accepting each others inspections and banding but the states always retain the right to re-inspect.

But we have a long way to go for broader coordination on watercraft inspections ...the idea of a western wide vessel tracking system (RFID) has been discussed and this may/should be the next big project for consideration

WHAT NEXT

- 2009 UMPS report is already dated as agency capacity has increased (e.g. Wyoming, Oregon)
 - “UMPS II” – We received funding from the QZAP RFP to update the UMPS document
 - Bill Zook will lead effort again
 - **Objective I of UMPS II** -- update the document and include new information on:
 - ballast tanks, propulsion systems (cooling water), decontamination effluent, and other trouble areas
 - We now have three and in some cases four full field seasons of watercraft decontamination and thus have a lot of new field expertise to draw from
 - alternative and promising alternative/adjunct technology.
 - **Objective II** -- seek regional adoption of watercraft decontaminations programs including interjurisdictional reciprocity of watercraft decontaminations in the Columbia River Basin.
- Other Related Activities:***
- Sea plane decontamination video – ~10 minutes, footage to be shot in September
 - Don't Move a Mussel II – We are planning a remake of this video in later 2010
 - WIT Level II Training classes are scheduled for Fall 2010 and Spring 2011 with Wen Baldwin and staff.... November class full, October has three openings, Spring 2011 wide open
 - Recently completed a survey of commercial boat haulers – report due out shortly

Both the Watercraft Survey and Uniform Minimum Protocols and Standards reports and other information on the PSMFC Watercraft Inspection Program are available at :

<http://www.aquaticnuisance.org/wit>

Questions?

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