The Need for a Multi-State Biofouling Management Plan

BY: ERIN KINCAID, ROBYN DRAHEIM, CATHERINE DE RIVERA, AND IAN DAVIDSON
Many Invasive Species Management Plans
Reality
Research Needs

• Successful eradication methods
• Prioritization of vectors
• Monitoring procedure efficacy
• Basic biological and ecological information
• Ecological and economic impacts
• Natural barriers to spread
Goals

• Overview of current knowledge and policies addressing biofouling
• Assessment of vector operations
• Identify research gaps
• Develop a management framework
• Identify outreach options
Example of Regional AIS Management

• *Spartina* Eradication Action Coordination Team Work Plan
  • Developed communication lines, support network
  • Many localities have had success controlling *Spartina*
  • Reduced propagule pressure to areas without *Spartina*
Examples of Multi-Species Management

- National Firewood Task Force has provided recommendations for preventing interstate spread of forest pests
- Biosecurity plan in the Shetland Islands addresses ballast water and hull fouling
- WA ANS Plan establishes networks in Washington to address aquatic invaders
Prevention- Early Detection- Rapid Response- Control

• Issue: A region-wide monitoring and mapping effort is needed to document the extent and invasion risks from non-indigenous fouling species.

• Recommendation: In partnership with agencies and academic researchers, develop and execute a region-wide monitoring and mapping program.
Prevention- Early Detection- Rapid Response- Control

• Issue: Fouling communities are not static due to high influx from shipping and other aquatic activities.

• Recommendation: Regularly monitor areas of high risk using dive surveys and public questionnaires.
Prevention- Early Detection- **Rapid Response- Control**

- **Issue:** Rapid response is often limited by a lack of coordination and a misunderstanding of jurisdictions.

- **Recommendation:** Utilize Incident Command System (ICS) to compose hierarchy of responsibility for incursion response.
Prevention- Early Detection- Rapid Response- **Control**

- **Issue:** No protocol to decide when to eradicate, control, or do nothing to address established populations.
- **Recommendation:** Develop standardized protocols for determining action options.
Benefits of Regional Approach

• Increase coordination, develop contacts and a support system
• Address threats posed by vectors without set checkpoints
  • May provide structure to address temporary pathways
• Reduce gaps in policy, response activities, and funding
• Intercept stepping stone invasions that may lead to coast wide spread
Benefits of Multi-Species Approach

• Address over 60 key invaders found within the fouling community on this coast
• Allows for management focus on vectors, reducing spread of multiple organisms
• Greater flexibility for responding to future invasions
• Timely as recession amplifies fouling risk
Next Steps

• Tunicates are being used to populate plan
  • Flexible management
  • Momentum behind managing these species
  • Identify gaps between small-scale to region-wide management

• Receive input from Pacific Ballast Water Group membership

• Hoping to work with WRP-CC to broaden scope and further input
Comments or Suggestions?

E-mail: ekincaid@pdx.edu

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