



# A Regionally Consistent Approach to Regulating In-Water Cleaning

*Seattle, WA* | April 12, 2018  
Pacific Ballast Water Group

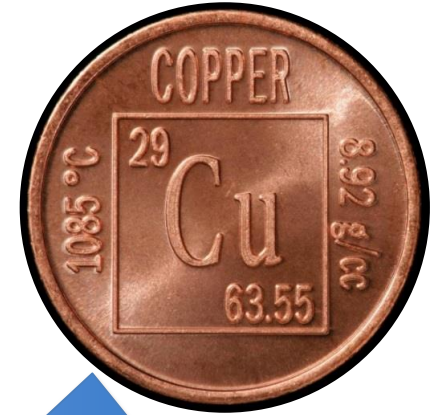
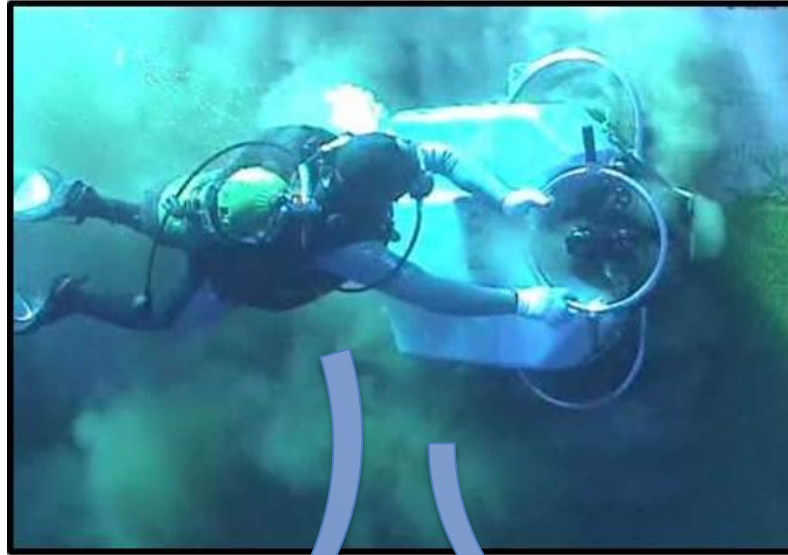
Chris Scianni  
California State Lands Commission

California State  
Lands Commission



# In-Water Cleaning: What are the concerns?

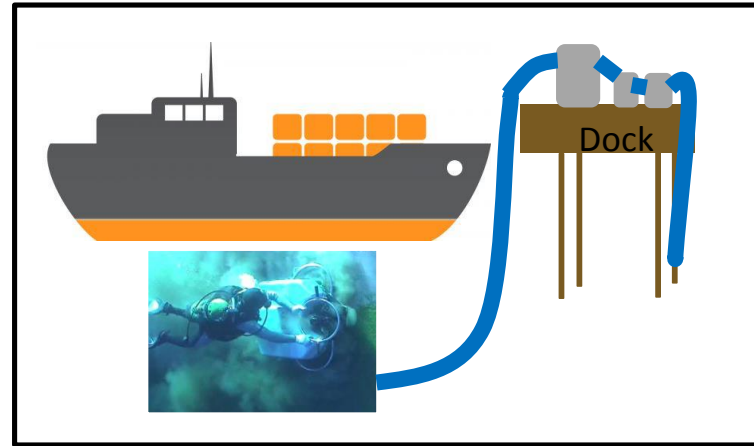
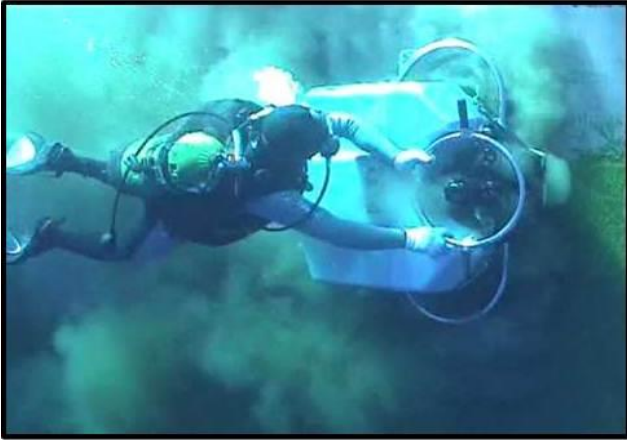
*Old paradigm*



# Paradigm shift:

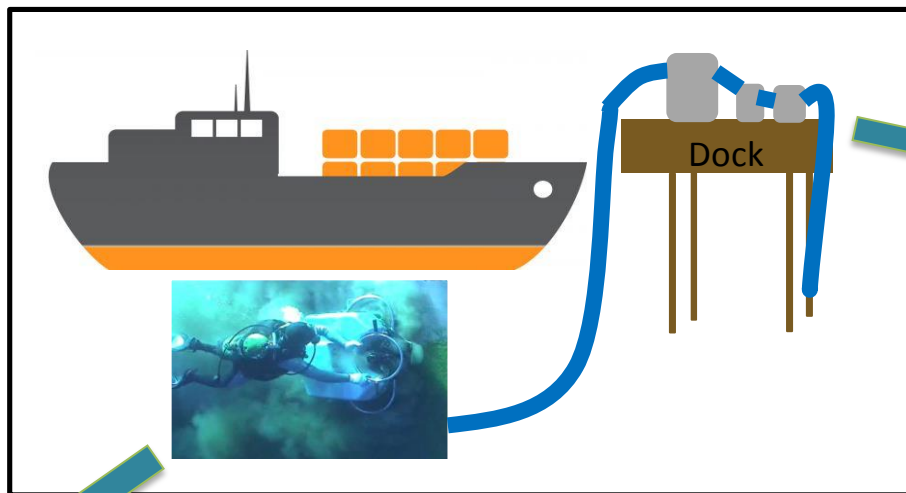
## Are the concerns the same?

*Old paradigm:  
In-water cleaning (IWC)*

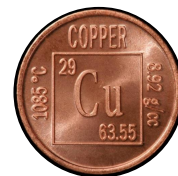


*New paradigm:  
In-water cleaning and  
capture (IWCC)*

# In-Water Cleaning and Capture: What are the concerns?



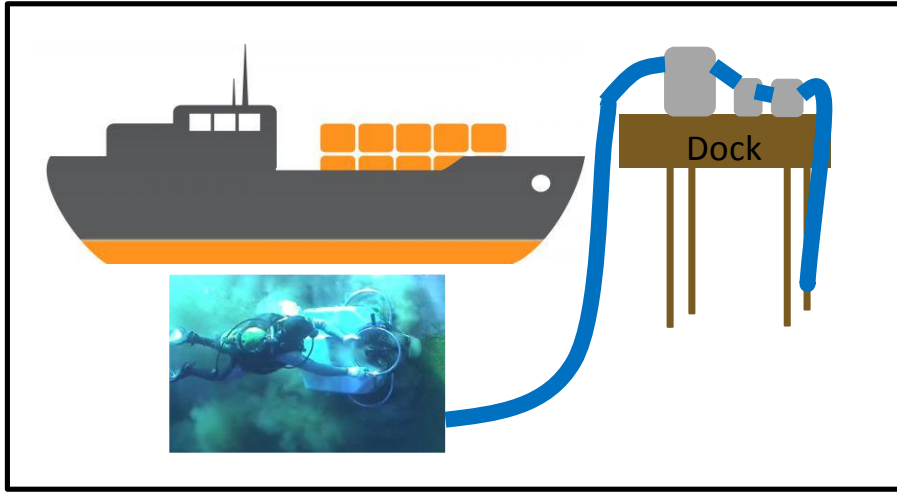
Treatment efficiency



Capture efficiency



# In-Water Cleaning and Capture: How is this regulated?



**Varies from waterbody to  
waterbody**



# Can we provide some clarity and consistency?

## Biofouling in the U.S. Pacific States and British Columbia



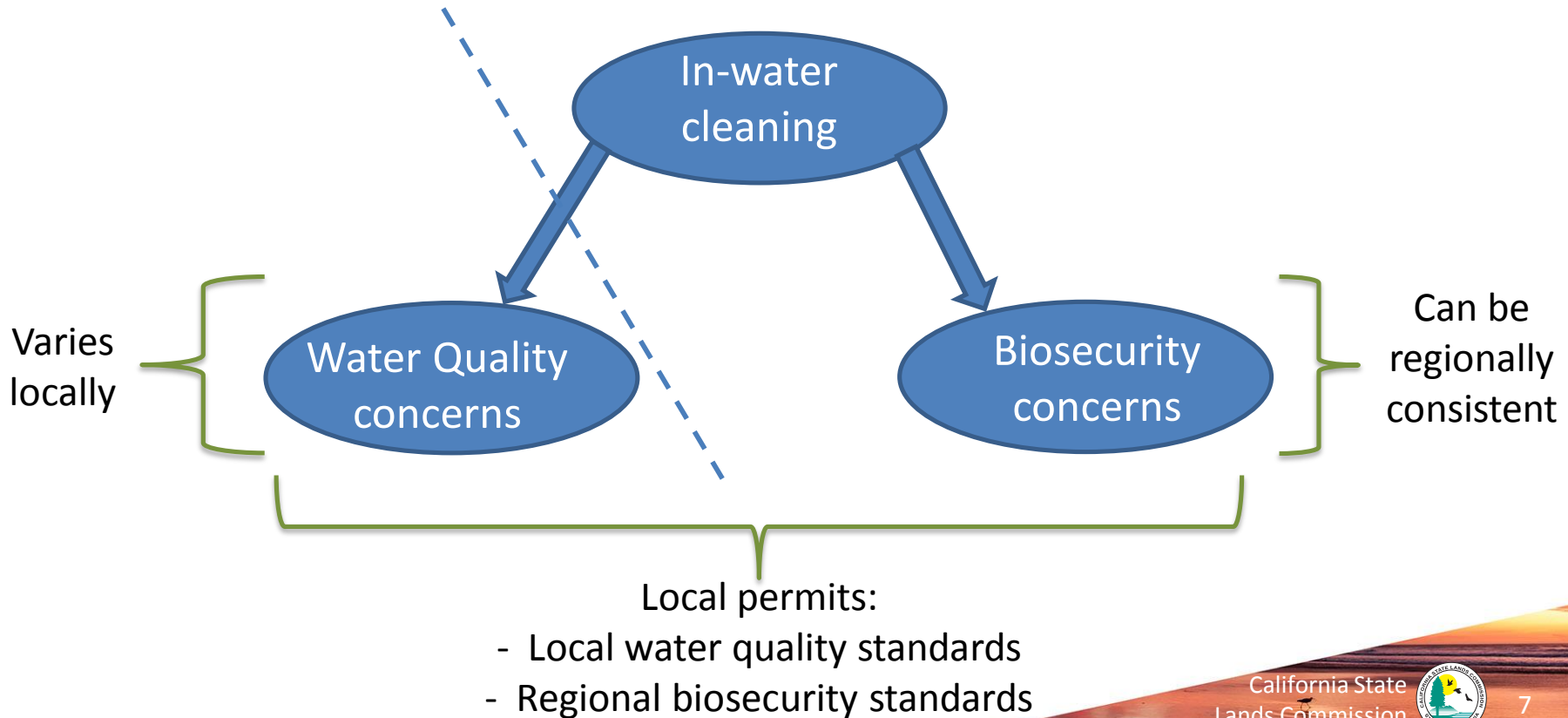
White Paper Prepared for the Coastal Committee of the  
Western Regional Panel on Aquatic Nuisance Species by  
Chris Scianni, Maurya Falkner, and Lisa DeBruyckere

4/11/2017

## 4.6 RECOMMENDED ACTION ITEMS FOR THE WRP COASTAL COMMITTEE

- Develop a regionally consistent in-water cleaning regulatory model framework for commercial merchant and passenger vessels to identify and reduce NIS introduction risks. Water quality-based restrictions on in-water cleaning vary from water body to water body and state to state to province, so a comprehensive (chemical and biological pollution) and consistent regional framework is not practical for the region. However, it is practical to develop a regionally consistent regulatory model framework focused on reducing NIS introduction risks that can be employed throughout the region (if adopted and implemented within each state and province). The practical result of an effort like this would be that in-water cleaning permitting agencies in individual jurisdictions would consider applications from two perspectives, one would be the local water quality perspective and the other would be the regionally consistent bioinvasion perspective.

# Can we provide some clarity and consistency?



# Evaluation of In-water Cleaning and Capture Technologies for Ships





# Evaluation of In-water Cleaning and Capture Technologies for Ships



- Four IWCC technologies accepted
- Test protocols will be finalized in April 2018
- Trials to be conducted in:
  - Baltimore (Summer 2018)
  - Alameda (Fall 2018)
- All test results and final reports will be public

# Evaluation of In-water Cleaning and Capture Technologies for Ships



- Perfect timing for us (PBWG and WRP CC) to make sure our regional concerns are included in the test protocols

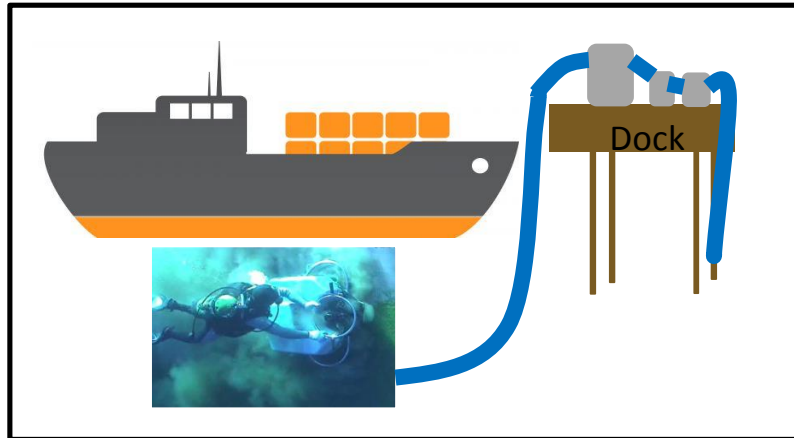
# Our Steps: 1. Assess Interest



- Would this help in your state?
- Who permits these activities in your state?

## Our Steps: 2. Desired End Product

- Framework for NIS prevention requirements for IWCC technologies
- What are the critical control points? [next slide]
- What's the control method/threshold for each? [next slide]

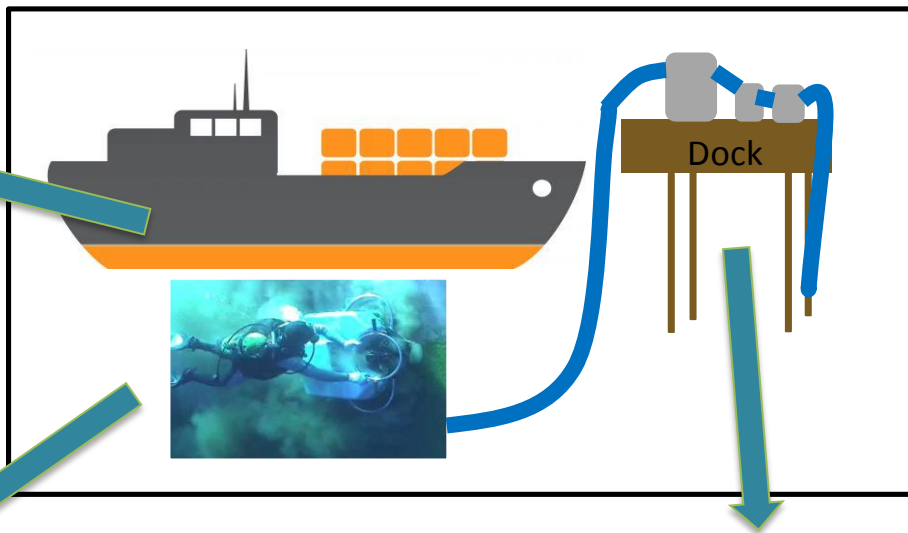


# Our Steps: 2. Desired End Product

Critical control points?

## 3. Removal efficiency?

Does this matter to us? For permitting to reduce risk of releasing organisms during an activity?



## 1. Point of capture:

Are they capturing everything that is removed? Difficult to measure, but dyes can help?

## 2. Treatment/end-of-pipe:

What's an appropriate maximum organism size (e.g., 50 or 25 or 12  $\mu\text{m}$ )?



# Our Steps: 3. Homework

For Pacific state representatives:

- Find out which agencies in your state regulate in-water cleaning (for NIS and water quality)

As WRP CC chair:

- Create a very brief draft framework based on our thoughts/ideas here
- Ensure that ACT IWCC protocols are measuring for these concerns/control points
- Share via email with PBWG and WRP CC for comments/feedback (repeat as necessary)



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# THANK YOU & QUESTIONS

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Lands Commission

