

# Proposed Vessel Biofouling Regulations Update

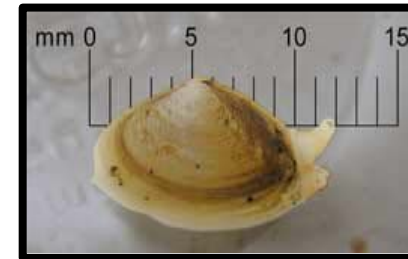
Chris Scianni  
MIACC & AFSWG  
April 26, 2017



# Biofouling: What is it?



# Biofouling: Why is it a Concern? Nonindigenous Species (NIS)

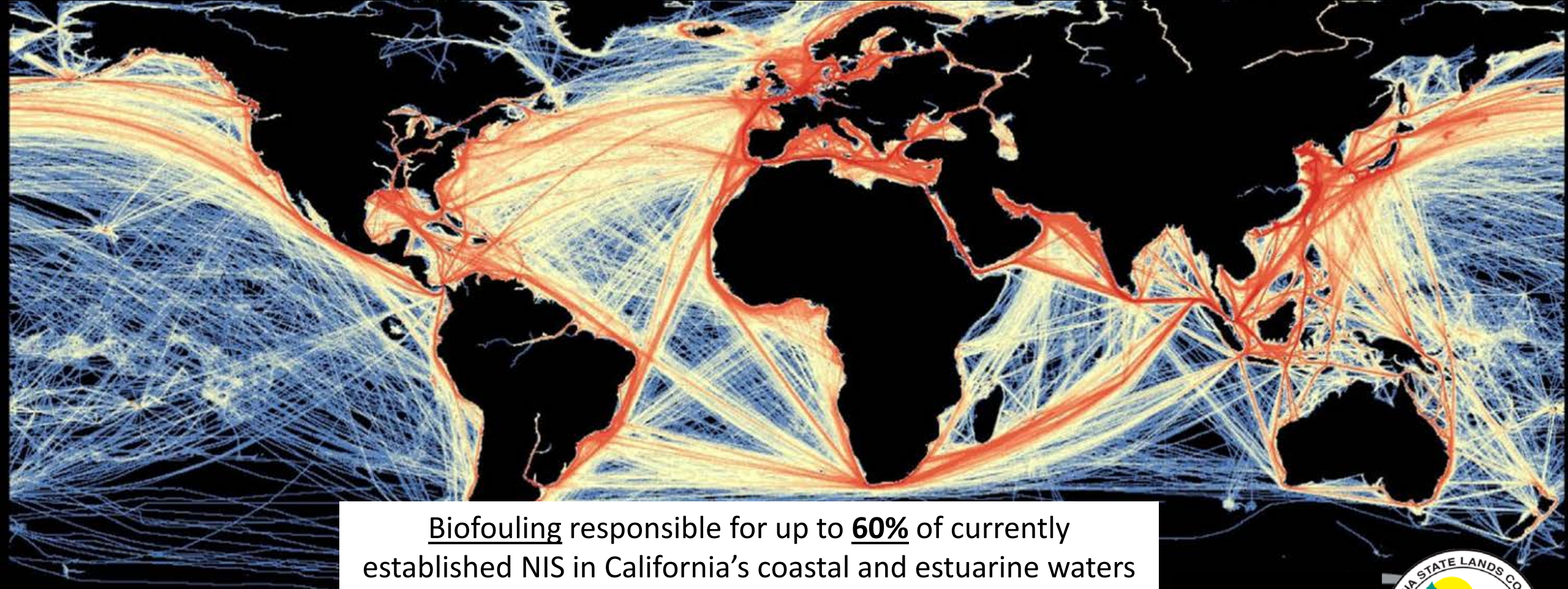


## Impacts:

- Economic: \$120 Billion annually in U.S.
- Environmental
- Human Health



# Biofouling: Why is it a concern?



Biofouling responsible for up to 60% of currently established NIS in California's coastal and estuarine waters (Ruiz et al. 2011)



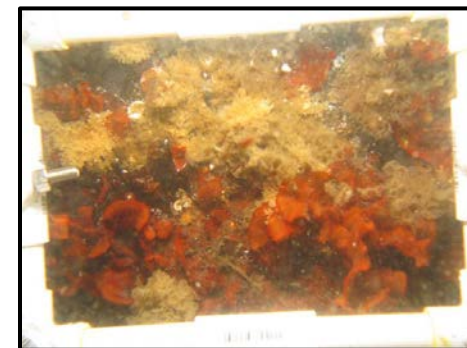
# Biofouling: How Do We Manage Risks?

## 1. Vessel biofouling management regulations

- California State Lands Commission

## 2. Biofouling white paper

- Coastal Committee of the Western Regional Panel on Aquatic Nuisance Species



# Vessel Biofouling Management Regulations



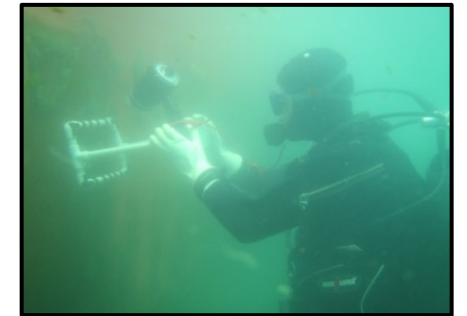
State Lands Commission Jurisdiction:

- 300 Gross Registered Tons and above
- Capable of carrying ballast water



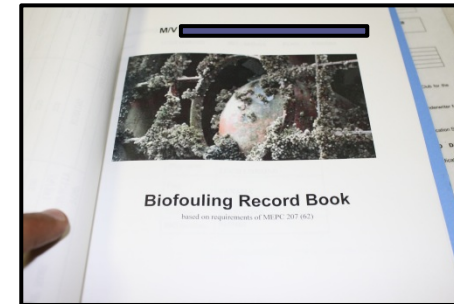
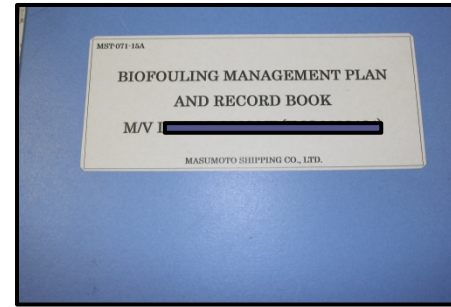
# Regulation Development Process

- Public process: three rulemaking actions
- Developed in consultation with stakeholders through technical advisory group since 2010
- Informed by 8+ years of vessel-reported data on biofouling management and operational practices
- Informed by 10+ years of funded biofouling research



# Proposed Regulations: Recordkeeping

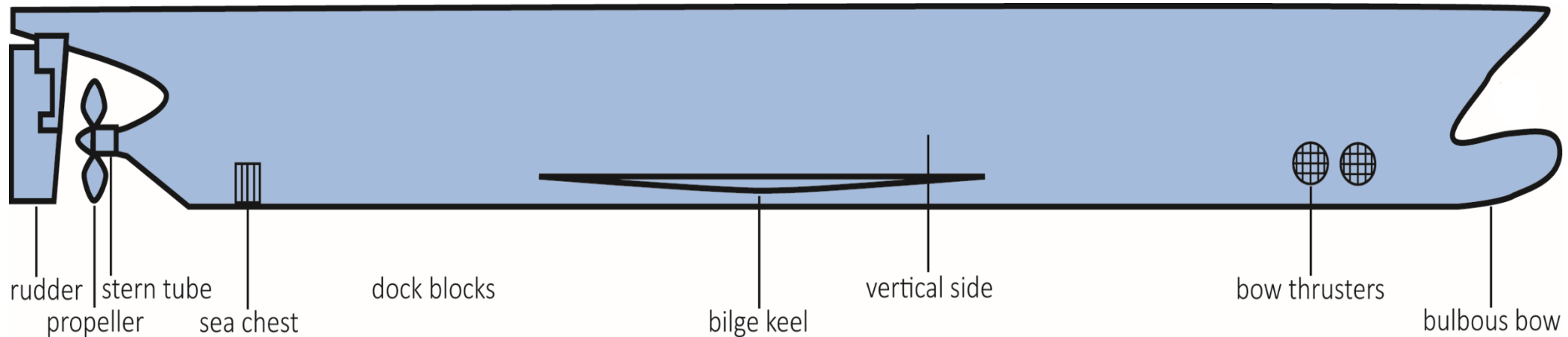
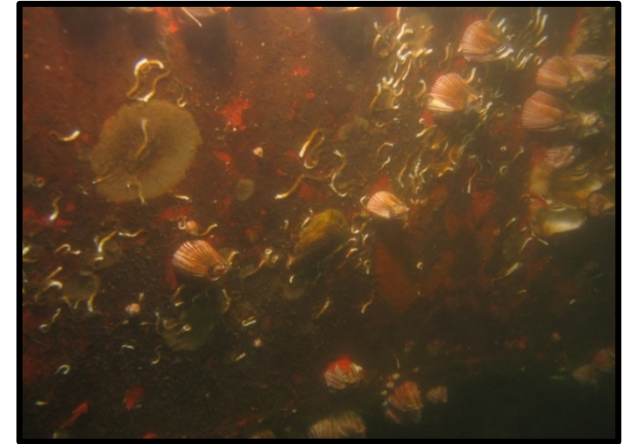
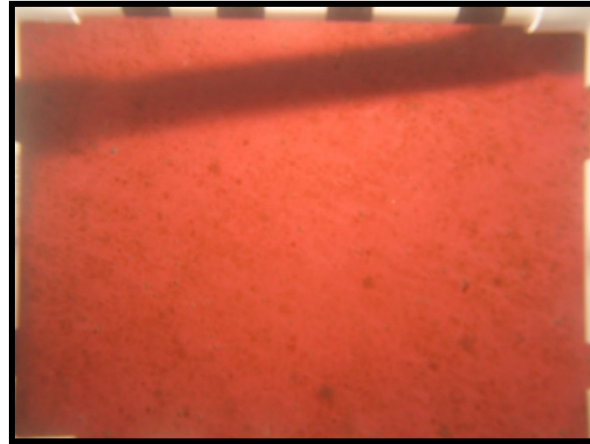
- Biofouling Management Plan and Biofouling Record Book
  - Aligned with 2011 IMO *Guidelines for the Control and Management of Ships' Biofouling to Minimize the Transfer of Invasive Aquatic Species*





# Proposed Regulations: Biofouling Management

- Codify best practices
- Hulls
- Niche areas



# Proposed Regulations: High-Risk Vessels

Extended residency periods (45+ days in the same location)



# Proposed Biofouling Regulations

## Status:

- Approved by State Lands Commission on April 20, 2017
- Will undergo 30 day administrative review by the Office of Administrative Law once submitted
- Proposed implementation date: October 1, 2017



## Availability of rulemaking documents:

[www.slc.ca.gov](http://www.slc.ca.gov)



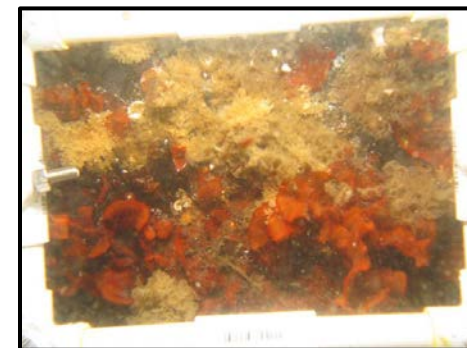
# Biofouling: How Do We Manage Risks?

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# Biofouling White Paper

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

Aquatic Nuisance Species Task Force



Western Regional Panel on Aquatic Nuisance Species



Coastal Committee



# Geographic Scope of Biofouling White Paper



Not to scale



# Topical Scope of Biofouling White Paper

## Four vector types:

- Commercial merchant and passenger vessels
- Recreational vessels
- Commercial fishing vessels
- Mobile marine infrastructure



# White Paper Structure

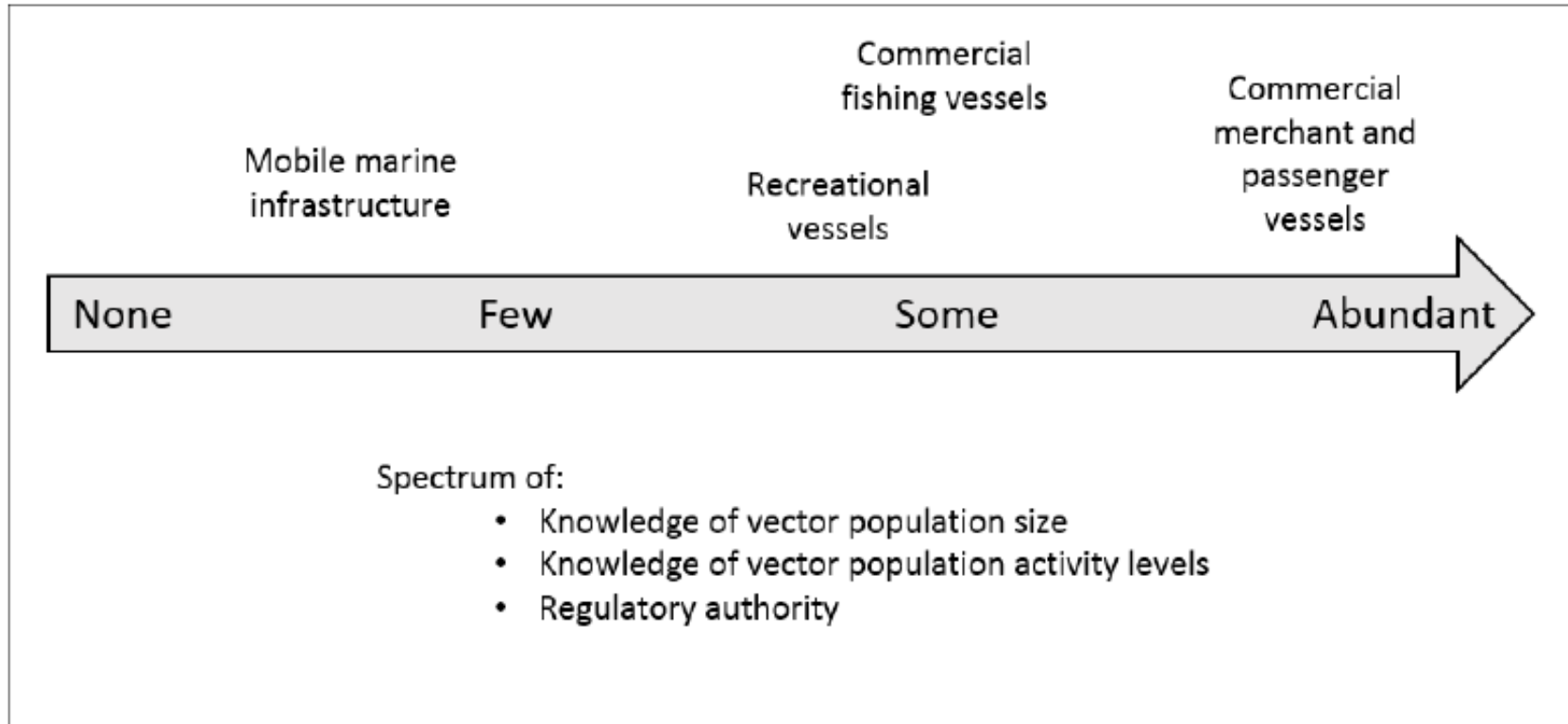
For each of the four vector types, we evaluated:

- Vector population and activity level (e.g., number of vessels and how often they move into and throughout each jurisdiction)
- Current authorities and requirements
- Current management options
- Current gaps





# Key Takeaway



# Key Recommendations

1. Develop regionally consistent best management practices (BMPs) for biofouling management of:
  - a. Recreational vessels
  - b. Commercial fishing vessels
  - c. Mobile marine infrastructure
2. Develop a regionally consistent in-water cleaning regulatory model framework for commercial merchant and passenger vessels to reduce NIS introduction risk.



# Thank You

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