Yes, we CANZ:
Initial compliance and lessons learned from regulating vessel biofouling management in California and New Zealand

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Abstract

In 2017 and 2018, California and New Zealand introduced new regulatory regimes for the maritime shipping industry by implementing and enforcing regulations for biofouling management. Both sets of regulations reflect the principles of the International Maritime Organization's Biofouling Guidelines and are designed to encourage proactive biofouling management to reduce the likelihood of nonindigenous species introductions. During the first year of enforcement, maritime shipping vessels that were subject to the respective regulations made similar numbers of arrivals at California (2,515) and New Zealand (2,556) ports. California and New Zealand regulators also conducted similar numbers of biofouling inspections during this time: 505 in California and 498 in New Zealand. Most instances of noncompliance in both jurisdictions were a result of incomplete understanding of these new regulations, however provisions to provide flexibility and education ensured the maritime shipping industry had opportunities to learn about the requirements, improve compliance, and reduce learning curves. An important lesson learned for both jurisdictions was the importance of extensive and targeted outreach to the various stakeholder groups that play a role in achieving compliance and effective risk reduction. The lessons learned and noncompliance trends identified during the first year of inspections in California and New Zealand provide valuable insights for consideration in light of the current review of the IMO Biofouling Guidelines and moves to develop biofouling requirements in other jurisdictions.

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CALIFORNIA STATE LANDS COMMISSION
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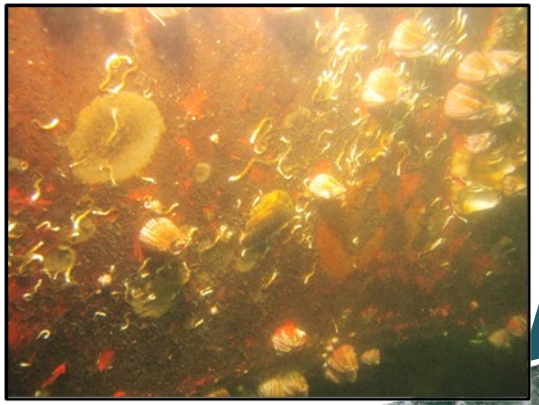
California State Lands Commission

BACKGROUND

- International regulations mostly focused on Ballast Water despite the recognition of biofouling as a significant pathway for invasive species.
- 2011- IMO guidelines for the management of biofouling (voluntary).
- California (2017) and New Zealand (2018) first jurisdictions to implement mandatory biofouling regulations.

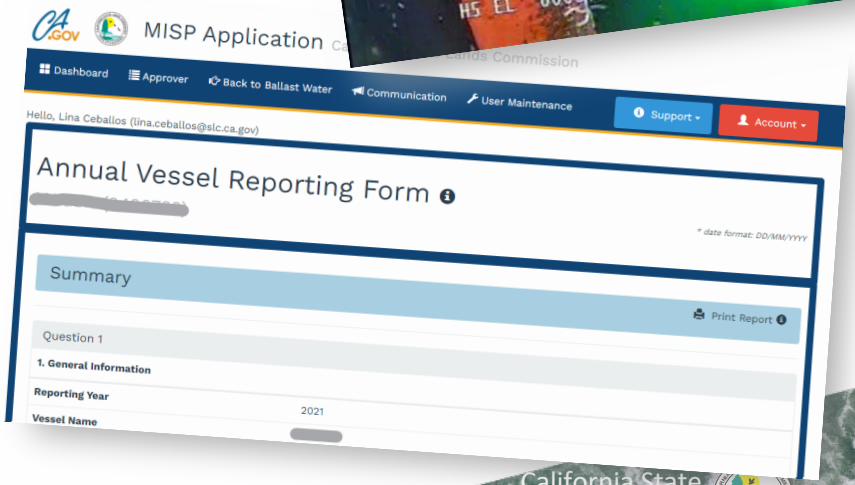


Regulation components - CALIFORNIA

Vessels subject: Over 300 GT capable of carrying ballast water. Phased implementation

Documentation required:

- Annual Vessel Reporting Form
- BFMP (niche areas and coatings)
- BFRB



Compliance assessment:
Inspection of documentation

- 60-day grace period

Compliance actions:

- Notice of violation

Regulation components – NEW ZEALAND

Vessels subject: All vessels that arrive to NZ after visiting other countries

Documentation required: Evidence for 1 of 3:

- Clean hull
- Best practices: BFMP and BFRB
- Approved treatment providers

Compliance assessment:

Inspection of documentation and physical verification

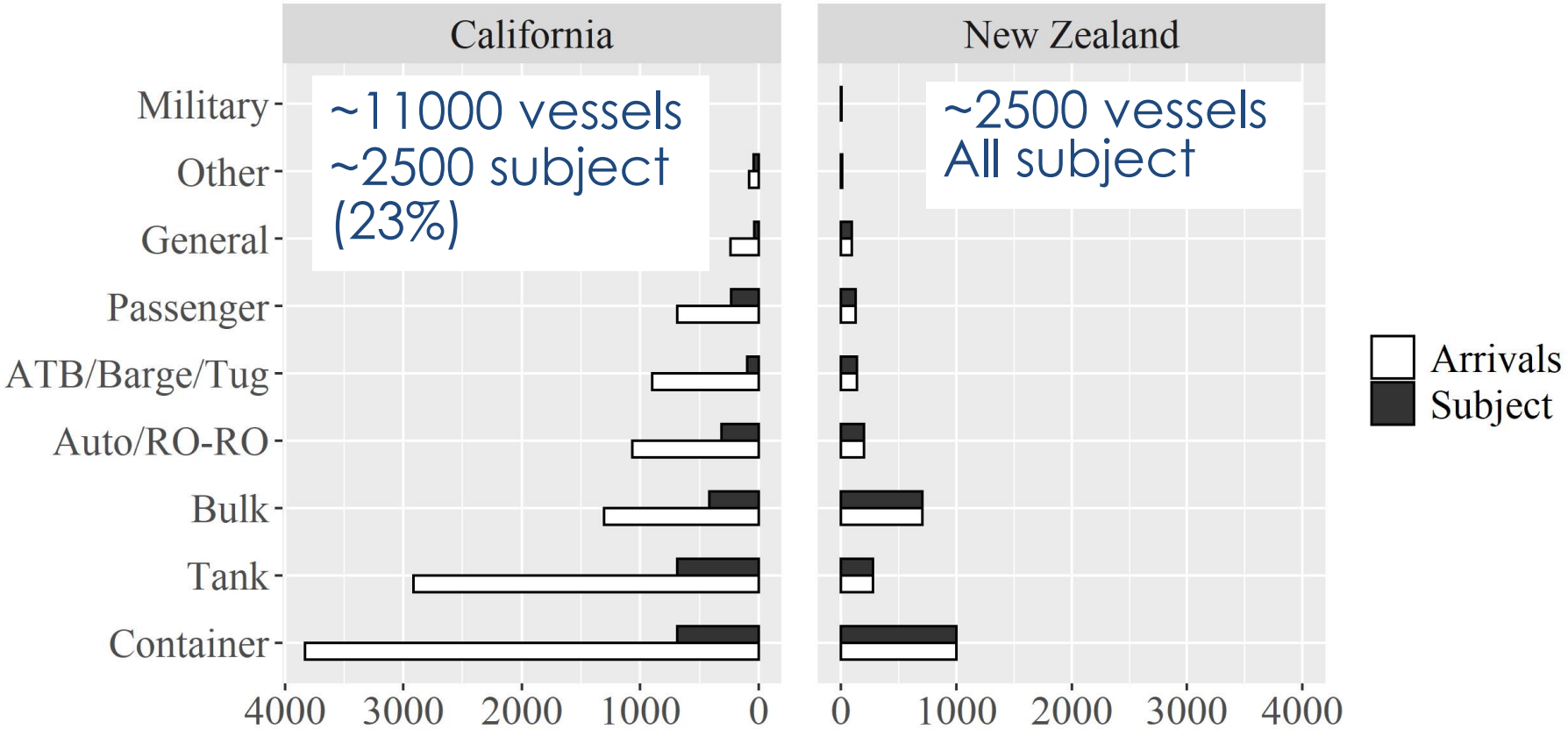
Compliance actions: determined by risk

- Itinerary restriction
- Additional evidence requested
- Direction to leave and come back clean

CA-NZ Regulations

- Awareness of the problem
- Reduce risk
- Following best practices
- Proactive management

Vessel population



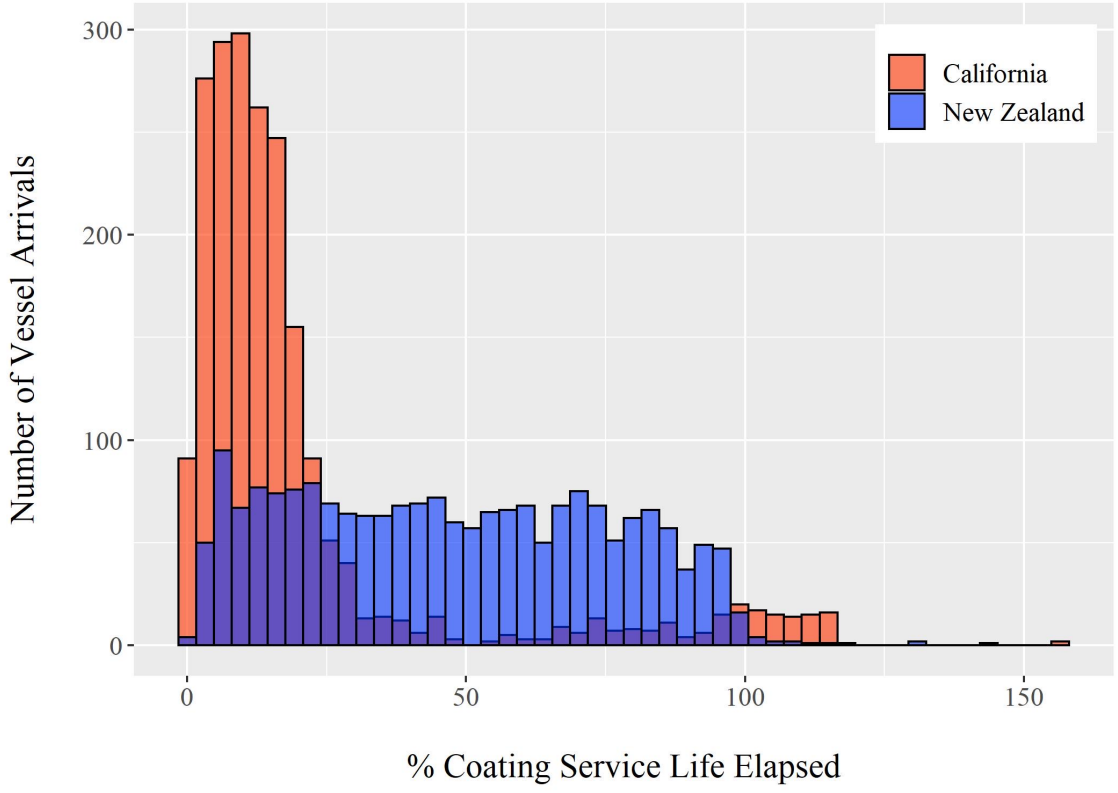
Risk profiling and preventive management

- Antifouling coatings lifespan
- In-water cleaning actions
- Number of idle periods
- Fresh water transits
- Speed

Photo: Laurie Penland. Smithsonian Institution

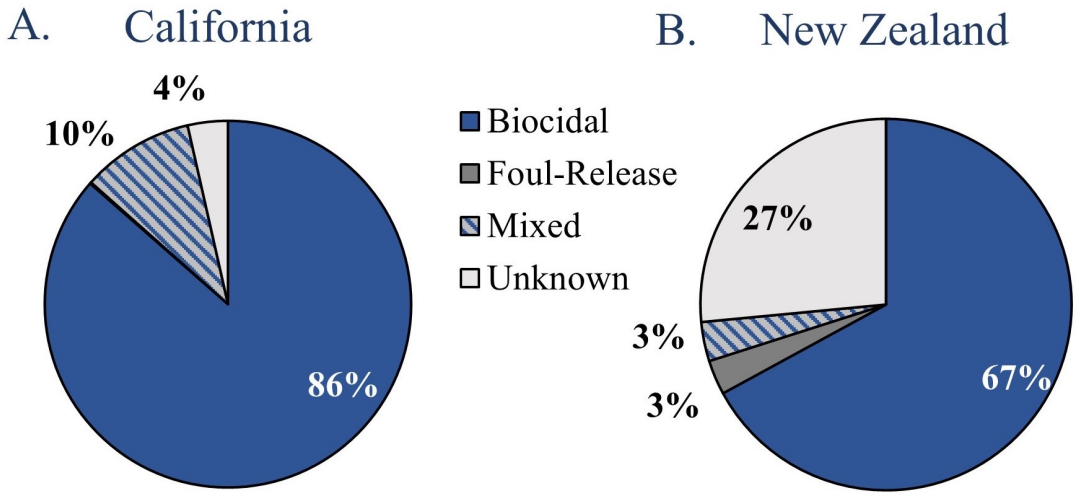
Antifouling Coating effective lifespan

- NZ – typical fleet distribution
- Most California vessels have recently applied coatings due to phased implementation of regulations.

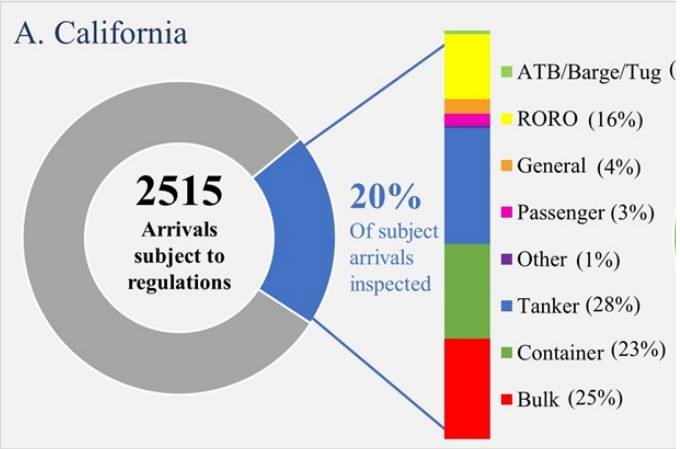


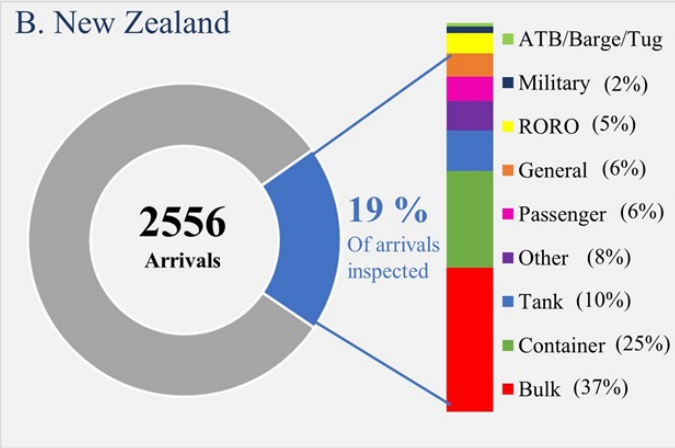
Antifouling coating strategies

- Biocidal coatings are the most common strategy used
- Different vessel types with different operational profiles use variable strategies



Inspection and compliance





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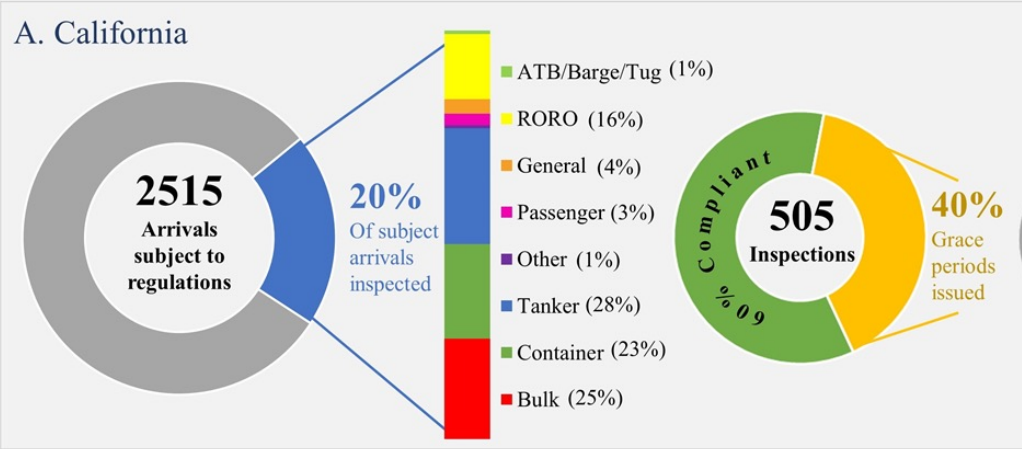

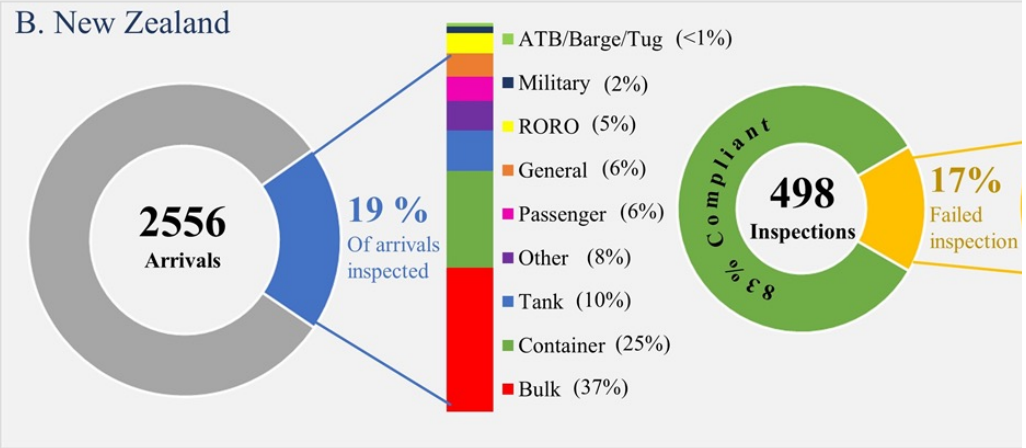

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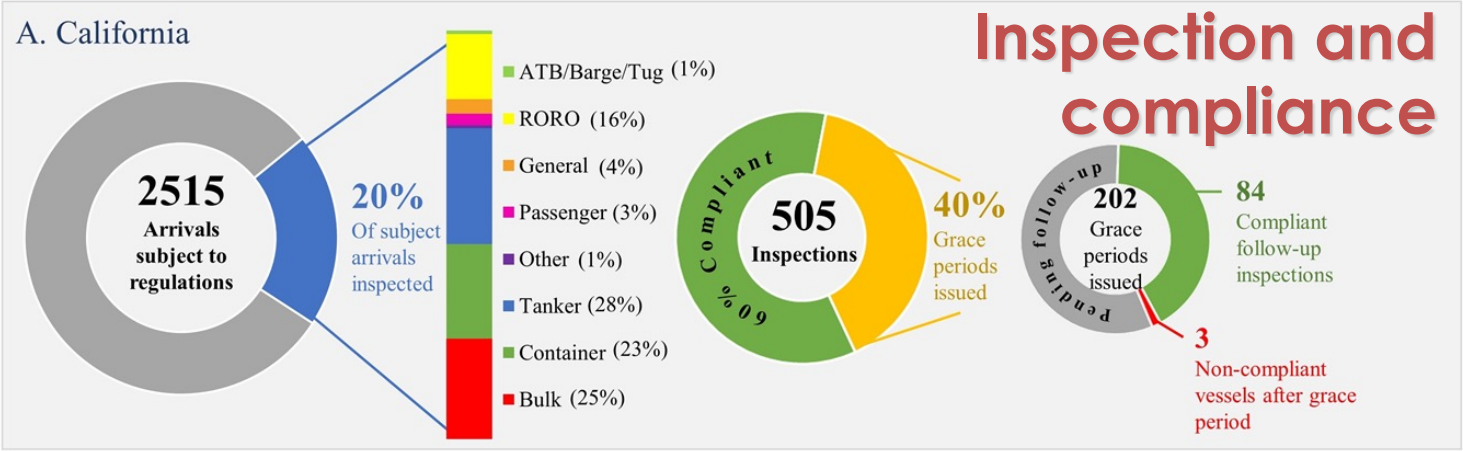
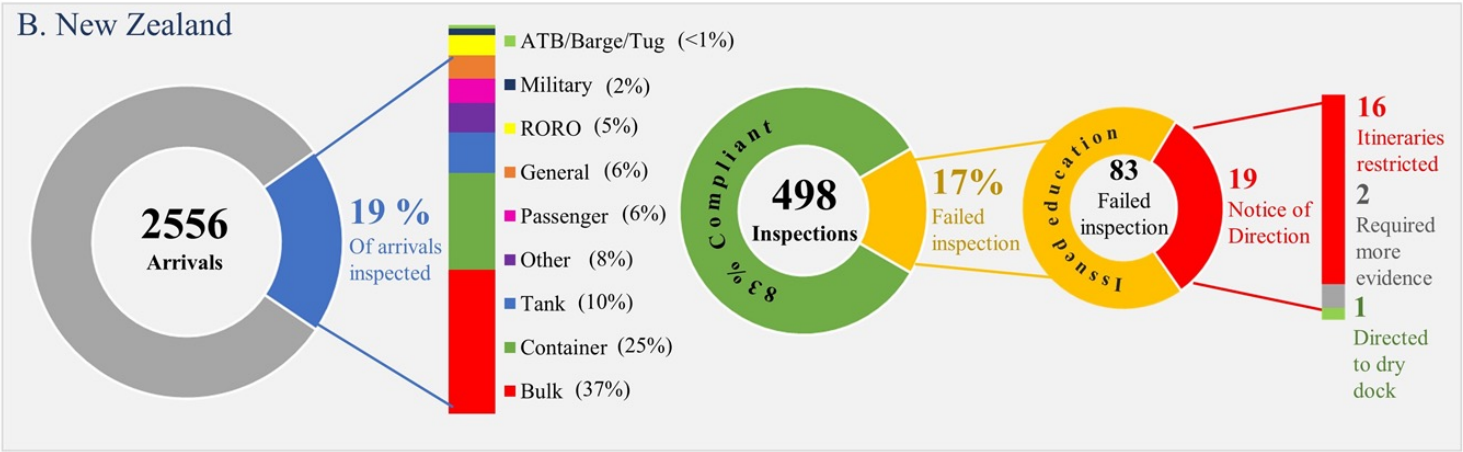
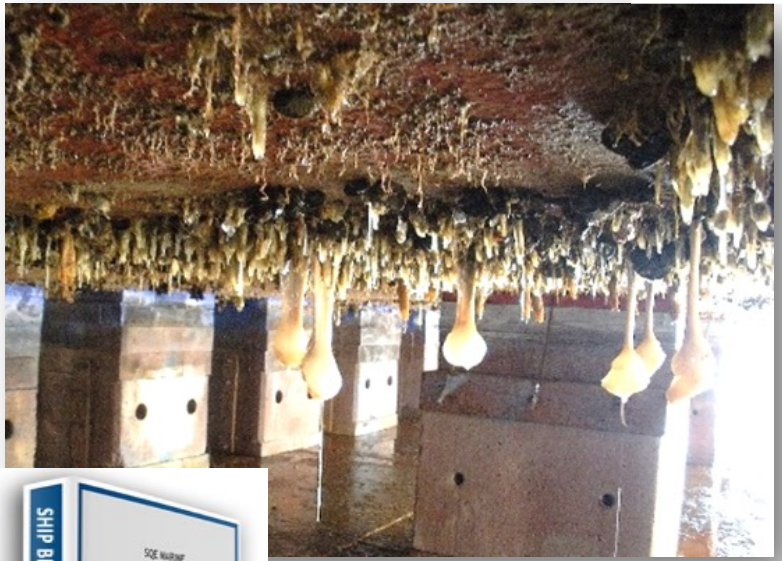




LESSONS LEARNED

- Steep learning curve for both regulators and shipping industry
- Change in paradigm, ballast water management vs. biofouling management
- Generic management language in the BFMPs often observed – leading to undefined actions (e.g. “clean as necessary”).



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LESSONS LEARNED

- Initial enforcement flexibility is critical for a successful implementation (CA: 60-day grace period, NZ: 4 Years lead-in period)
- Most noncompliance cases due to lack of understanding.
- Outreach and engagement.

THANK YOU & QUESTIONS

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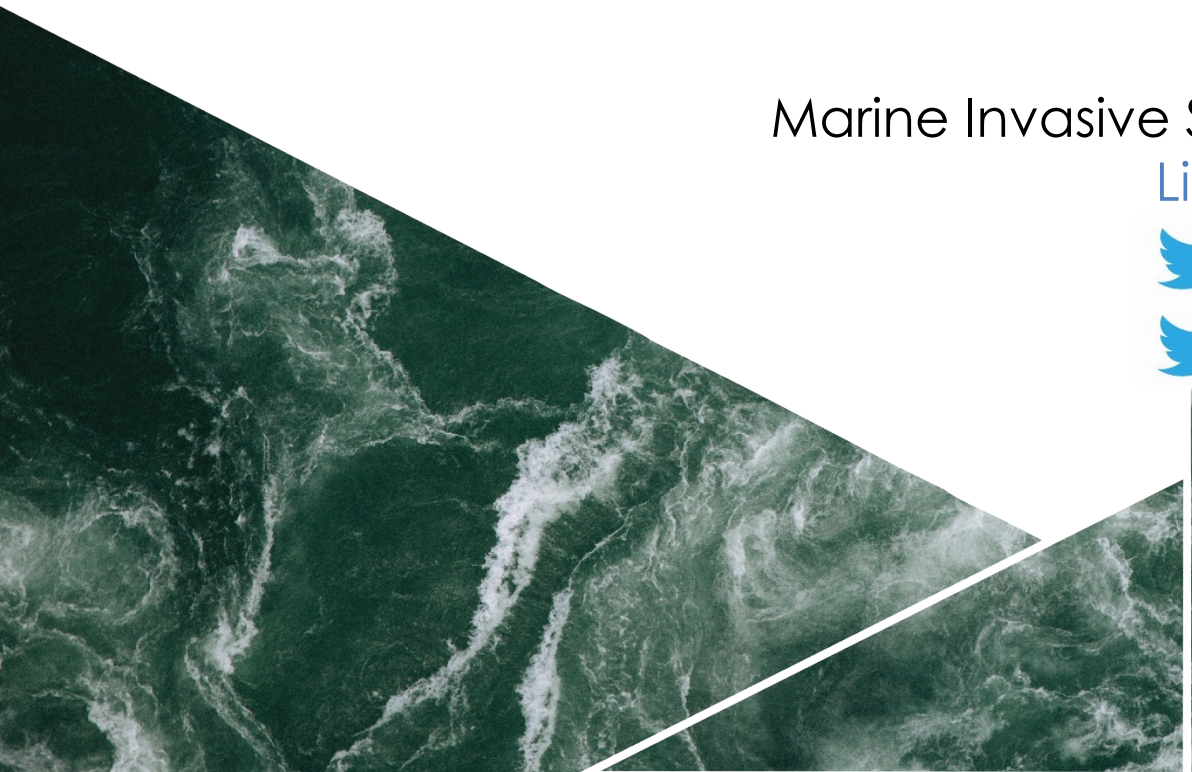

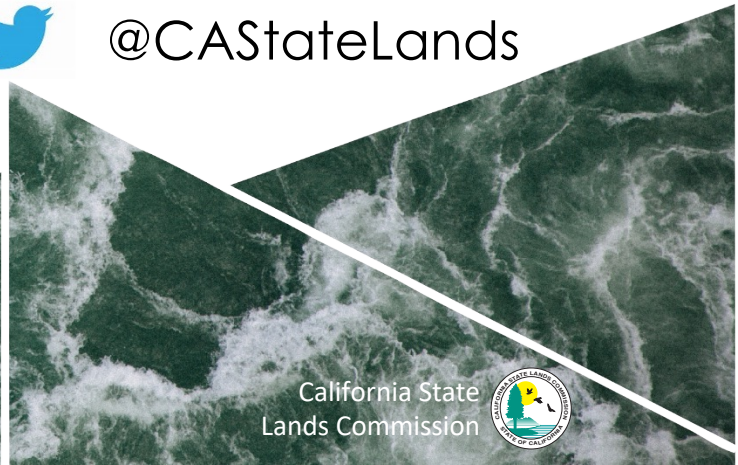

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