HAWAIʻI INVASIVE SPECIES COUNCIL PUBLIC MEETING

May 20, 2020, 1:00 PM

VOTING MEMBERS

SUZANNE CASE
DEPARTMENT OF LAND & NATURAL RESOURCES

PHYLLIS SHIMABUKURO-GEISER
DEPARTMENT OF AGRICULTURE

KEITH KAWAOKA D.Env
DEPARTMENT OF HEALTH

NICHOLAS COMERFORD, Ph.D.
UNIVERSITY OF HAWAII

MARY ALICE EVANS
DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

DAVID RODRIGUEZ
DEPARTMENT OF TRANSPORTATION

MEETING FORMAT

This meeting is being held remotely, with Council members, legislative participants, and staff participating via online meeting software.

We will attempt to livestream the meeting at:
https://www.youtube.com/channel/UCFT6SAASZIUxd_XgZMCjGsQ

AGENDA

1. Call to order
2. Introductions
3. Approval of minutes from November 22, 2019 meeting
4. Presentation: Summary of HISC & CGAPS 2025 Joint Strategy and restructured HISC Working Groups
5. Submittal: Requesting approval of the “HISC & CGAPS 2025 Joint Strategy: In Support of the Hawai‘i Interagency Biosecurity Plan”
6. Presentation: Aquatic biosecurity capacity needs relating to the federal Vessel Incidental Discharge Act
7. Presentation: Outline of potential biosecurity video projects
8. Public Comments
9. Adjournment

Summary of HISC & CGAPS 2025 Joint Strategy and restructured HISC Working Groups

HISC & CGAPS 2025 Joint Strategy

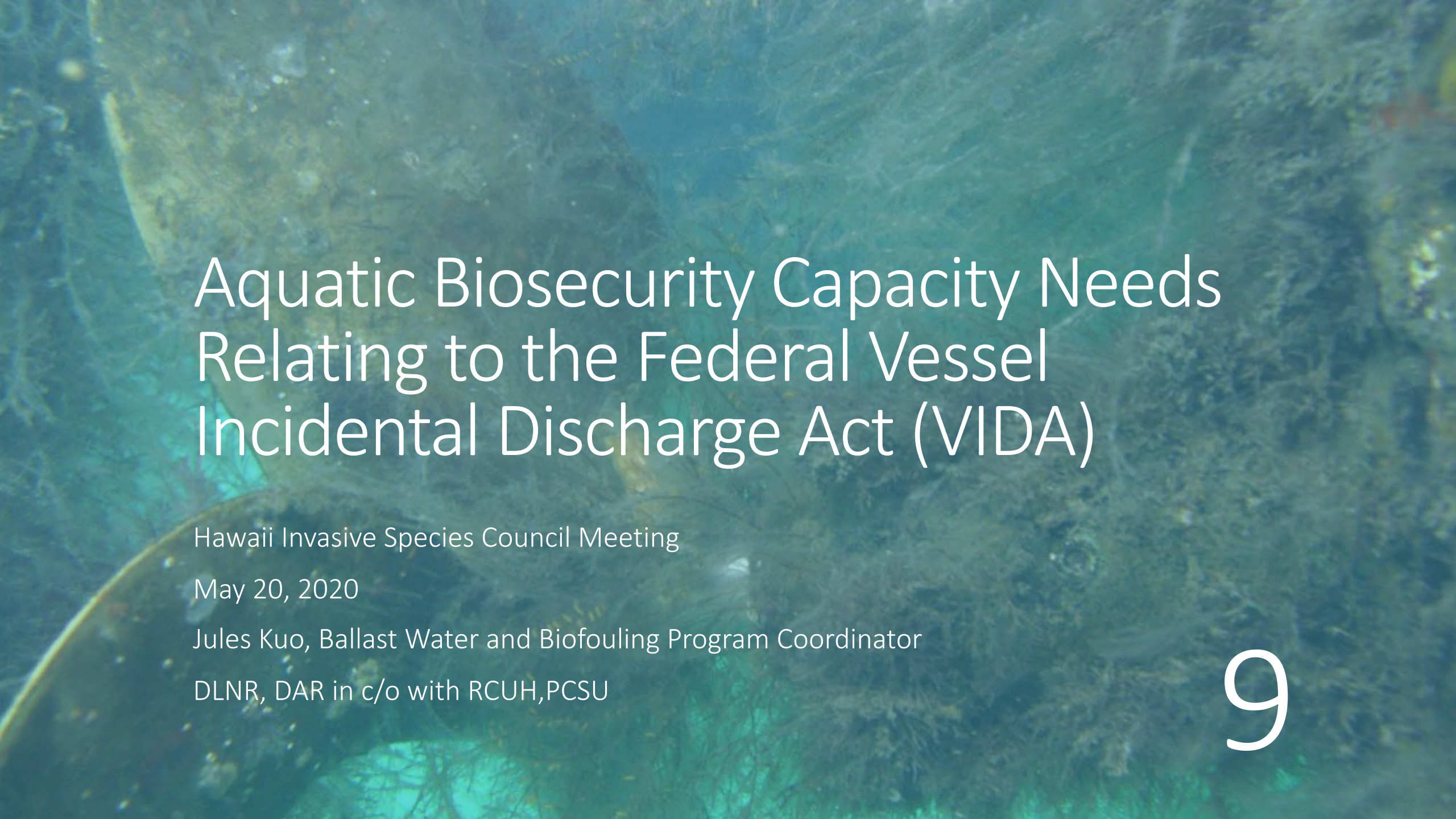
In Support of the Hawai'i Interagency Biosecurity Plan

HISC Working Groups

Restructured to implement 2025 strategies

Working Group	Chair(s)	HISC Staff	Core Members
PREVENTION/EDRR	Jonathan Ho (HDOA)	Leyla Kaufman (MP)	USDA APHIS, CBP, Nate Dube (OISC/ISCs), Mike Melzer (UH-PEPS), USFWS
LANDSCAPE-SCALE CONTROL	Rob Hauff (DOFAW)	Pat Chee (DOFAW)	HDOA*, Springer Kaye (BIISC/ISCs), Dr. Cheng, Mike Melzer (UH-PEPS), HAL
COMMUNITY ENGAGEMENT	Christy Martin (CGAPS)	Randy Bartlett (HISC),Elizabeth Speith(643pest)	Josh Atwood (DOFAW)*, DAR, Franny Brewer (BIISC/ISCs)
AQUATIC BIOSECURITY	Kim Fuller, Jules Kuo (DAR)	Chelsea Arnott (HISC)	NOAA, HDOT, HDOH
HISC PARTNER NETWORK	No Chair	ALL STAFF	WG Chairs, Designees – Mike Melzer (UH), Justine Nihipali??(DBEDT), HDOT, Lincoln Wells (HDOH)

Aquatic biosecurity capacity needs relating to the federal Vessel Incidental Discharge Act



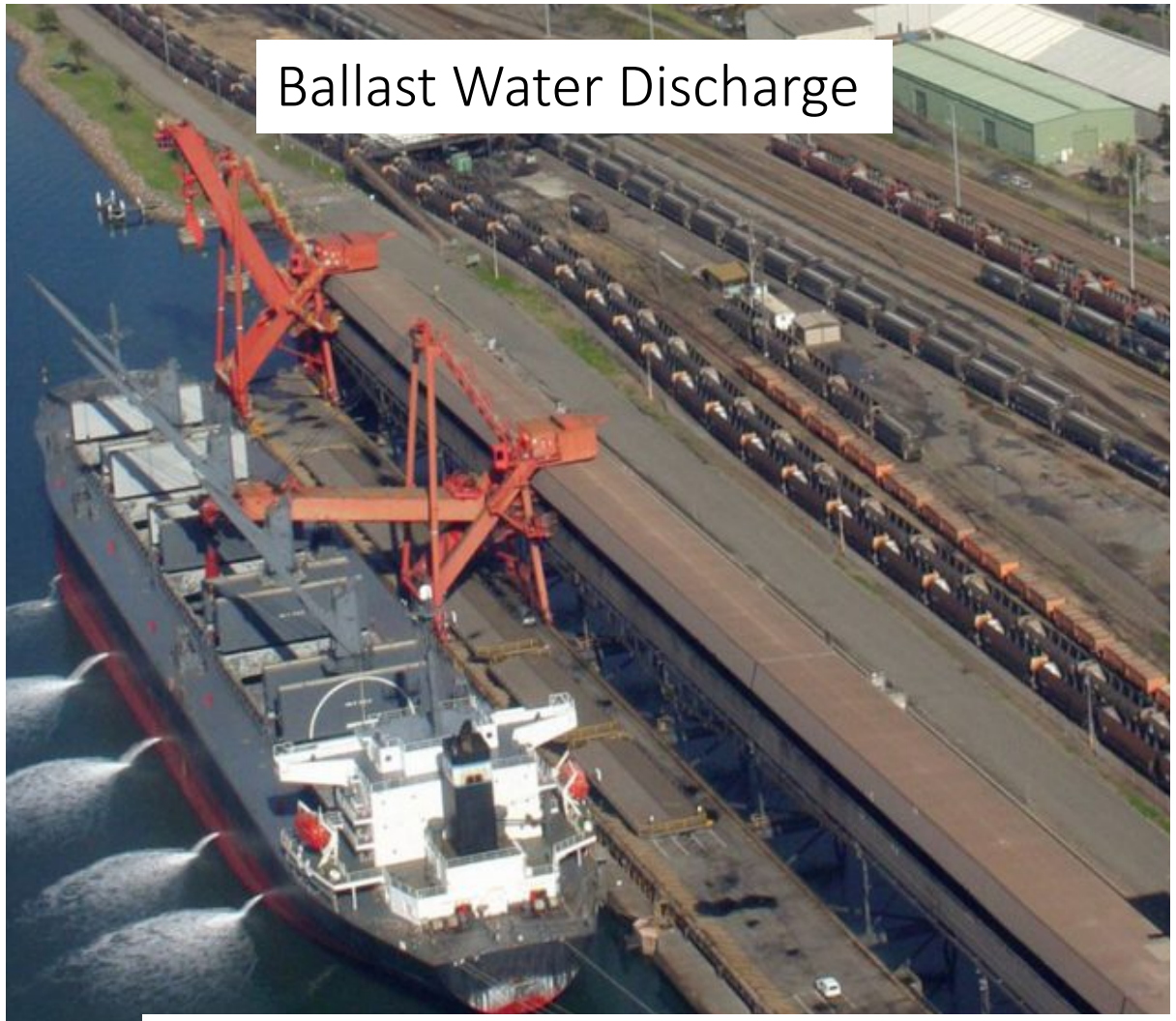
Aquatic Biosecurity Capacity Needs Relating to the Federal Vessel Incidental Discharge Act (VIDA)

Hawaii Invasive Species Council Meeting

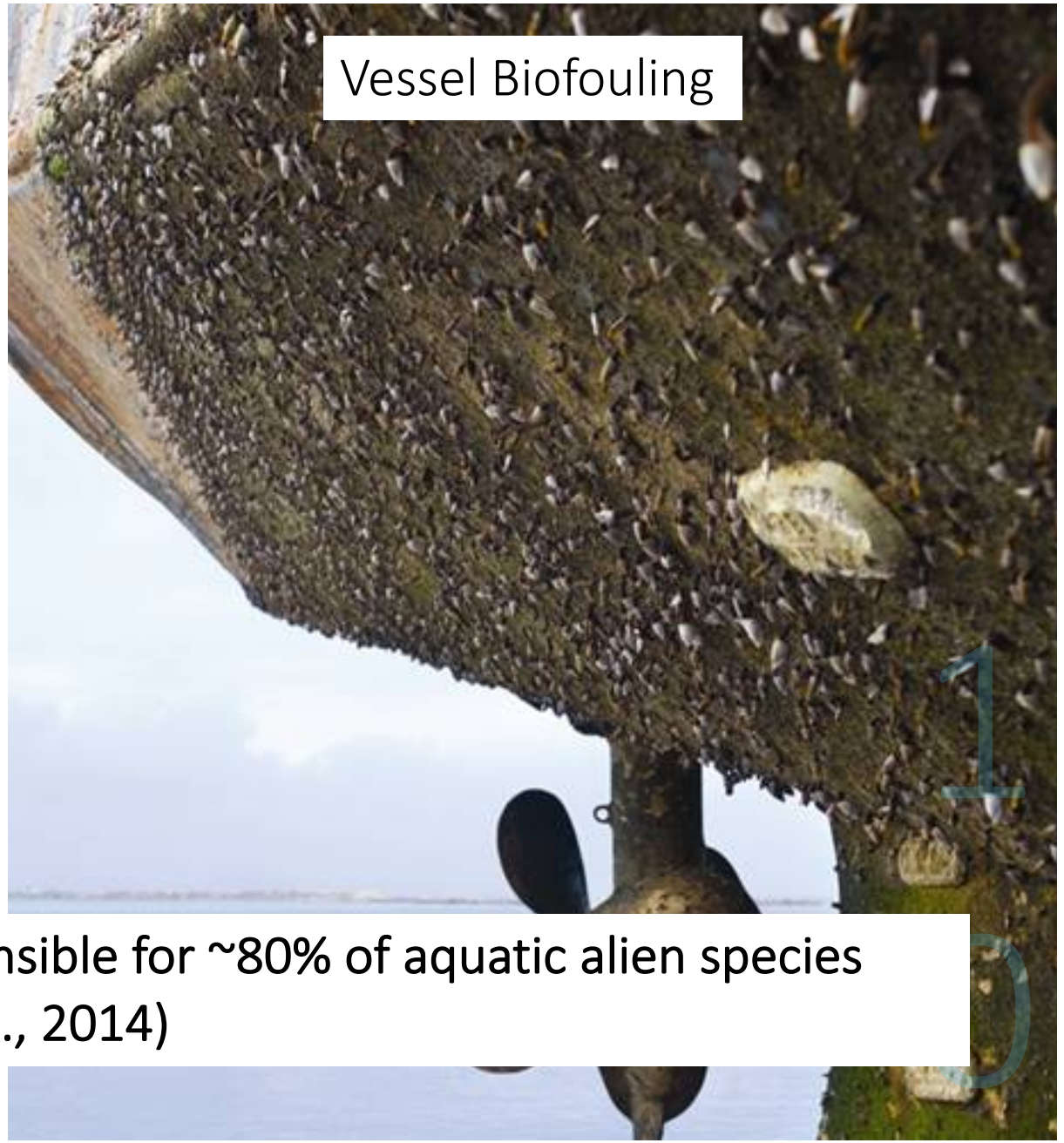
May 20, 2020

Jules Kuo, Ballast Water and Biofouling Program Coordinator

DLNR, DAR in c/o with RCUH,PCSU



Ballast Water Discharge



Vessel Biofouling

Ballast water and vessel biofouling responsible for ~80% of aquatic alien species introductions into Hawai'i (Davidson et al., 2014)

Commercial vessels are at higher risk for new aquatic alien species introductions, other types of vessels are at higher risk for transferring inter-/intra-island and onto coral reefs (Davidson et al. 2014)

A mysterious coral disease is ravaging Caribbean reefs

Off St. Thomas, the disease is moving faster and killing more corals than any disease before

https://www.sciencenews.org/article/mysterious-coral-disease-ravaging-caribbean-reefs

Melt away

Stony coral tissue loss disease can kill corals in a matter of days or weeks. Here, a lesion eats away at coral tissue over six weeks.

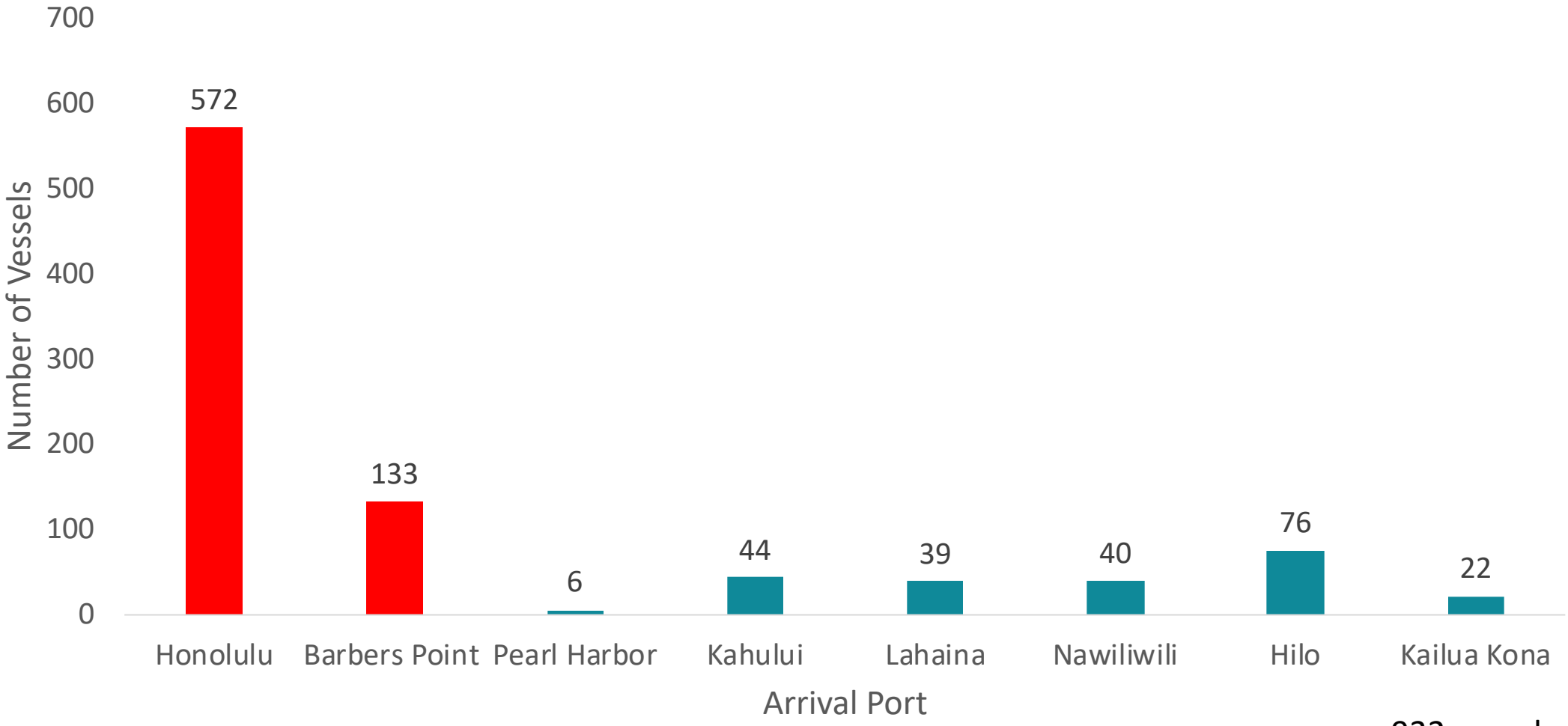
SONORA MEILING

A disease on the move

The researchers are trying to keep up with where and how the disease is spreading. Pathogens may have made their way from Florida to St. Thomas in the ballast water of ships, says coral reef ecologist Dan Holstein of Louisiana State University in Baton Rouge. Stony coral tissue loss disease has also been reported on reefs off the east coast of Mexico, Jamaica, St. Maarten and the Dominican Republic.

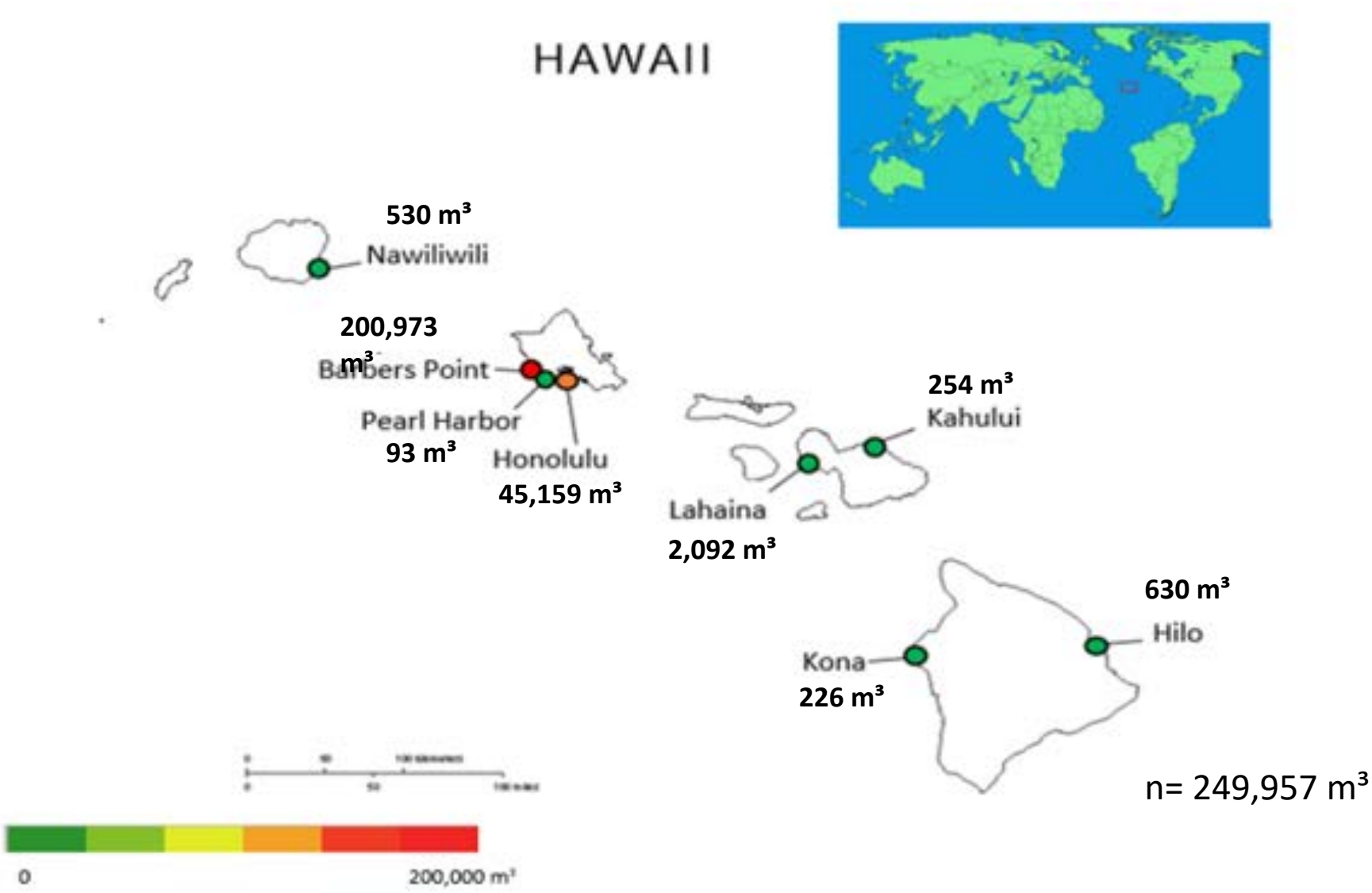
https://www.sciencenews.org/article/mysterious-coral-disease-ravaging-caribbean-reefs

Total Ships that Arrived to Each Port 2019



n= 932 vessels

Ballast Water Discharged at Each Port



n= 249,957 m³

Timeline of Past Events

1997 AAOTF Act 237

2000 HRS §187A-32

2003 DLNR, DAR AIS Management Plan

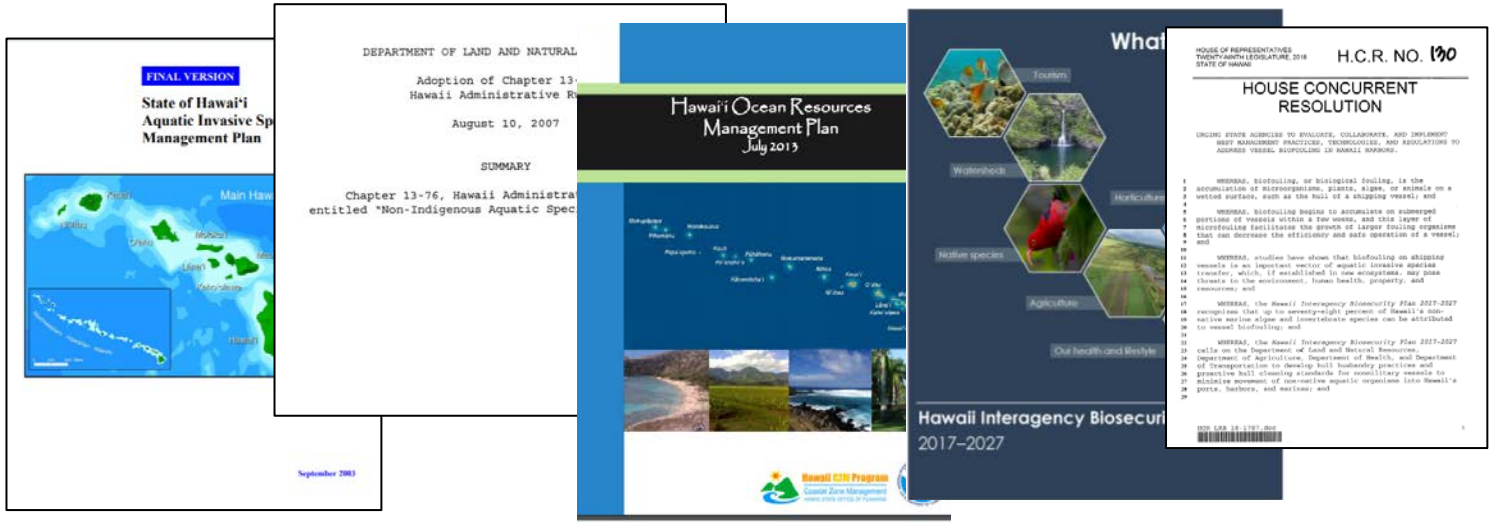
2007 HI Ballast Water Rules Ch13-76

2013 Hawaii Ocean Resources Management Plan

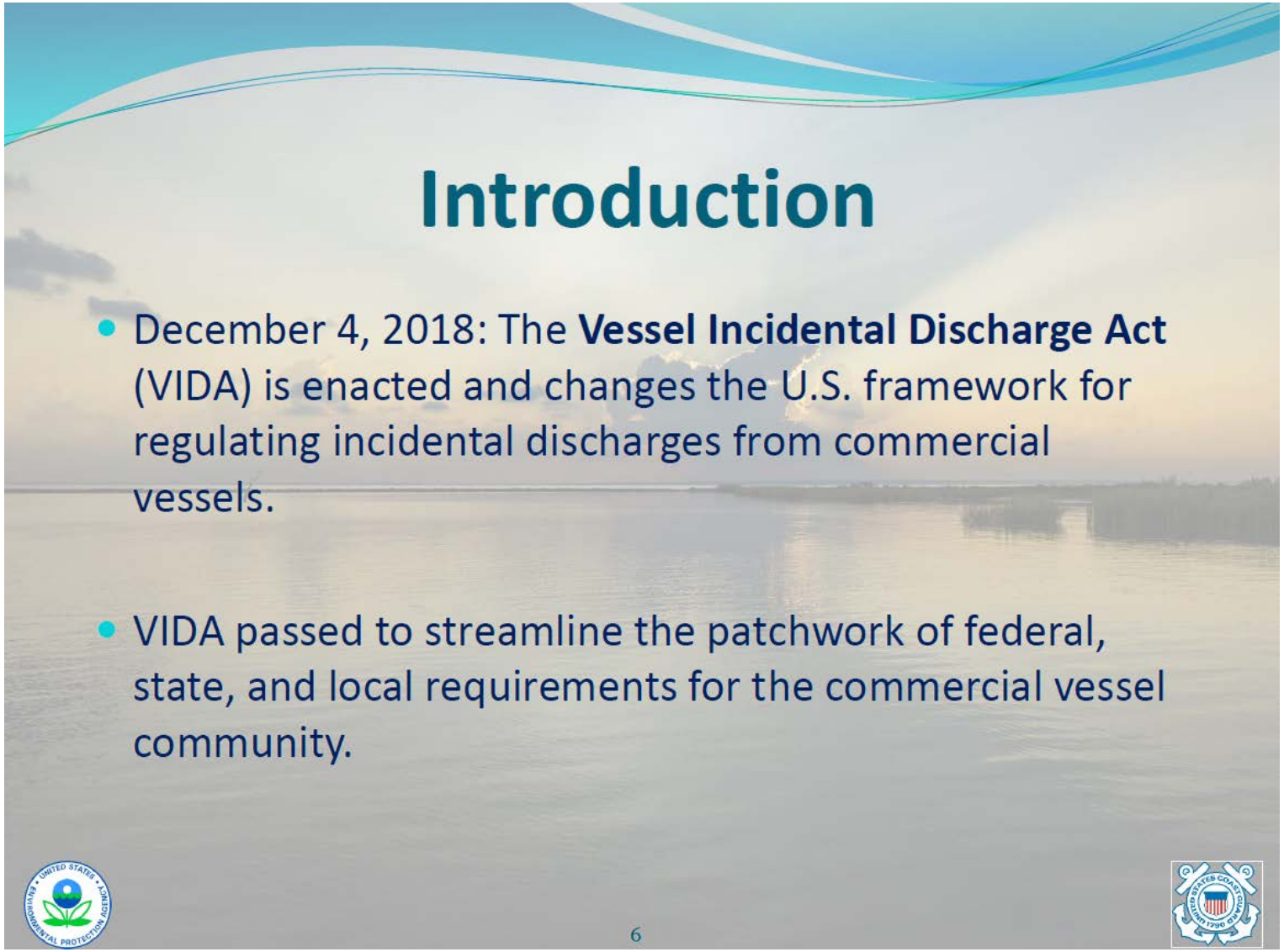
2017 Hawaii Interagency Biosecurity Plan

2018 Vessel In-water Cleaning Resolution HCR130 & HISC 18-1 Reso

2018 VIDA



Vessel Incidental Discharge Act (VIDA)



Vessel Incidental Discharge Act (VIDA)

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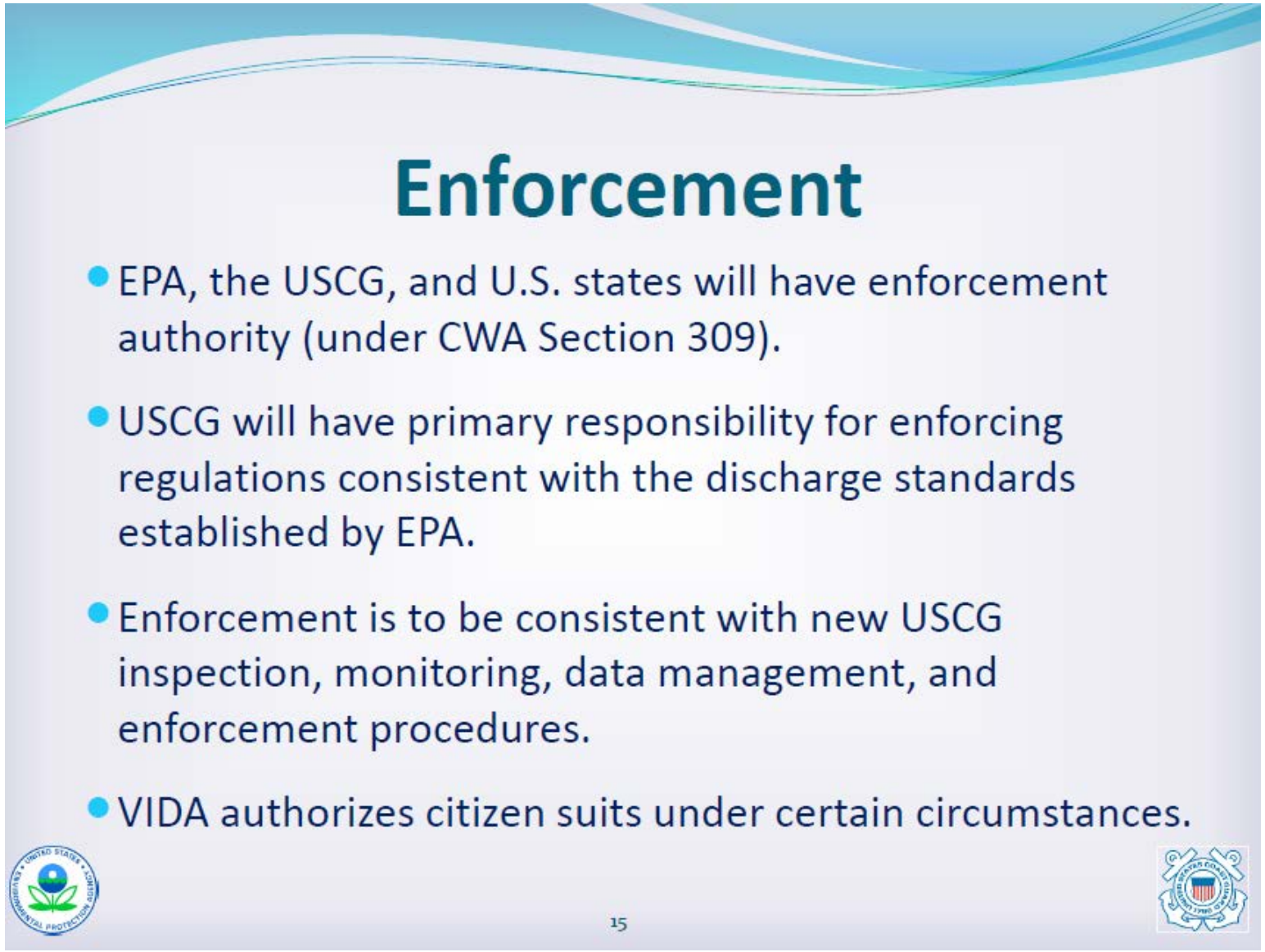

VIDA Impacts on State Regulatory Authority

HRS 266-1
HAR Ch 19-42-15

HRS Ch. 342D
HAR Ch. 11-54

HRS 187A-32
HAR Ch13-76

-States are preempted from regulating incidental discharges from fishing vessels over 79' into State waters including commercial harbors

-States are preempted from adopting more stringent compliance and enforcement standards to protect our aquatic resources

-States are preempted from charging a vessel fee to support their biosecurity program, unless the State already had pre-existing fees prior to VIDA

Table 3. U.S. State/Canadian Province 2014 Ballast Water/Biofouling Program Annual Budgets - arranged highest to lowest by 2014 budget.

State/Province (Year started)	2014 Budget ($millions)	2014 Arrivals (Vessels)	Funding sources
California (2000)	$ 4.75	9,263	Shipping fee (100%)
Wisconsin (2010)	$ 0.35	944	Shipping fee (100%)
Washington (2000)	$ 0.34	4,047	State (85%); Watercraft fee (7.3%); Federal (7.3%)
Oregon (2001)	$ 0.22	1,044	Shipping fee (50%); State (50%)
Minnesota (2008)	$ 0.13	761	Shipping fee (85%); State (15%)
Hawaii (2000)	$ 0.11	1,025	100% grants: HISC and USFWS

https://wdfw.wa.gov/sites/default/files/publications/01837/wdfw01837.pdf

VIDA Preservation of State Authority

HRS 266-1
HAR Ch 19-42-15

HRS Ch. 342D
HAR Ch. 11-54

HRS 187A-32
HAR Ch13-76

-EPA/USCG VIDA State consultations

-Co-enforcement authority with USCG

-Data collection

-Petition through the Governor to request for more stringent compliance, monitoring, enforcement standards based scientific evidence

-Apply for no-discharge zones

-All Papahānaumokuākea Marine National Monument regs/policies are unaffected by VIDA

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2013 Hawaii Ocean Resources Management Plan

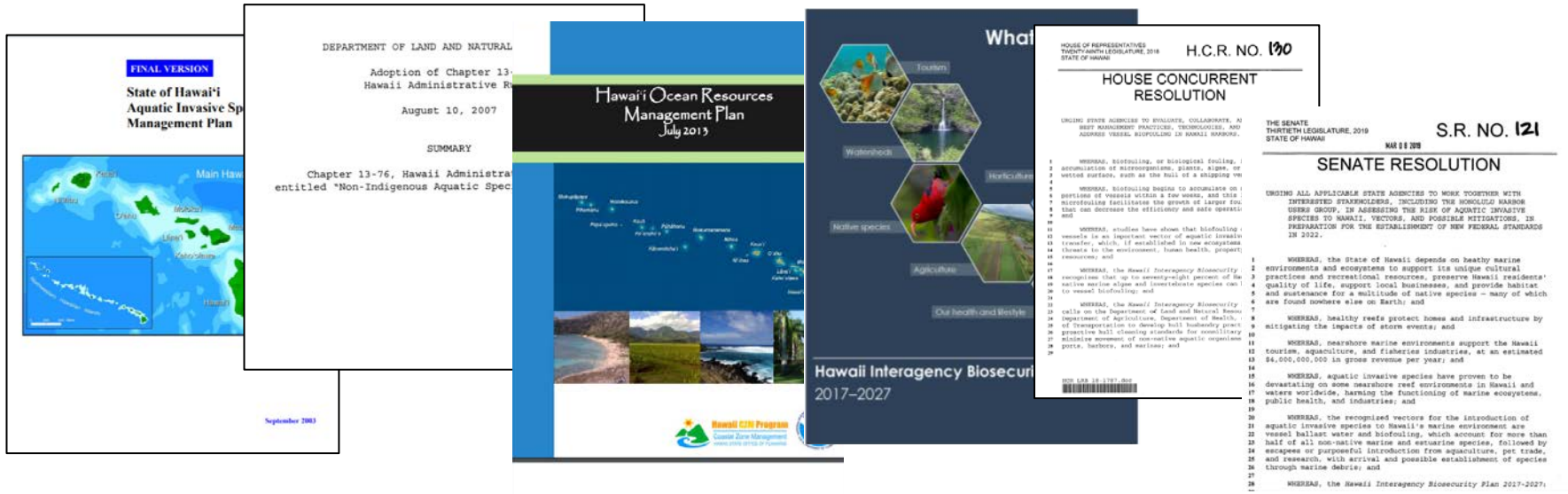
2017 Hawaii Interagency Biosecurity Plan

2018 VIDA

2018 Vessel In-water Cleaning Resolution HCR130 & HISC 18-1 Reso

2019 HI Aquatic Biosecurity Resolution SR121

2019 DOT/DLNR VIDA Fact-Finding Meeting



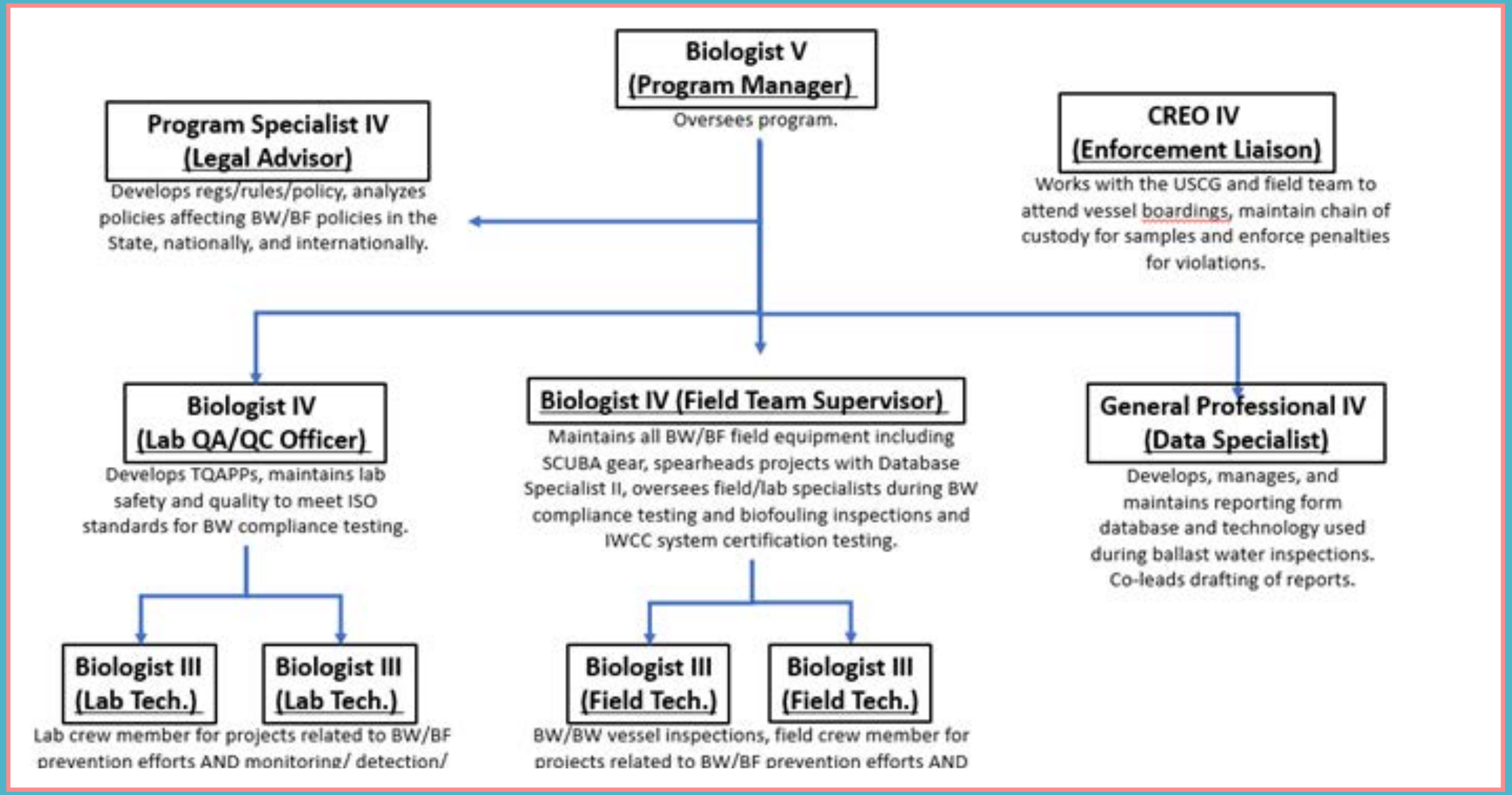
DOT/DLNR VIDA Fact-Finding Meeting

-Participants: USCG, NOAA, USFWS, maritime industry representatives, UH aquatic invasive species scientists, DOT, DLNR, DOH

-Goal: Establish a collaborative strategy for filling a major aquatic biosecurity gap – vessel biofouling and ballast water discharge

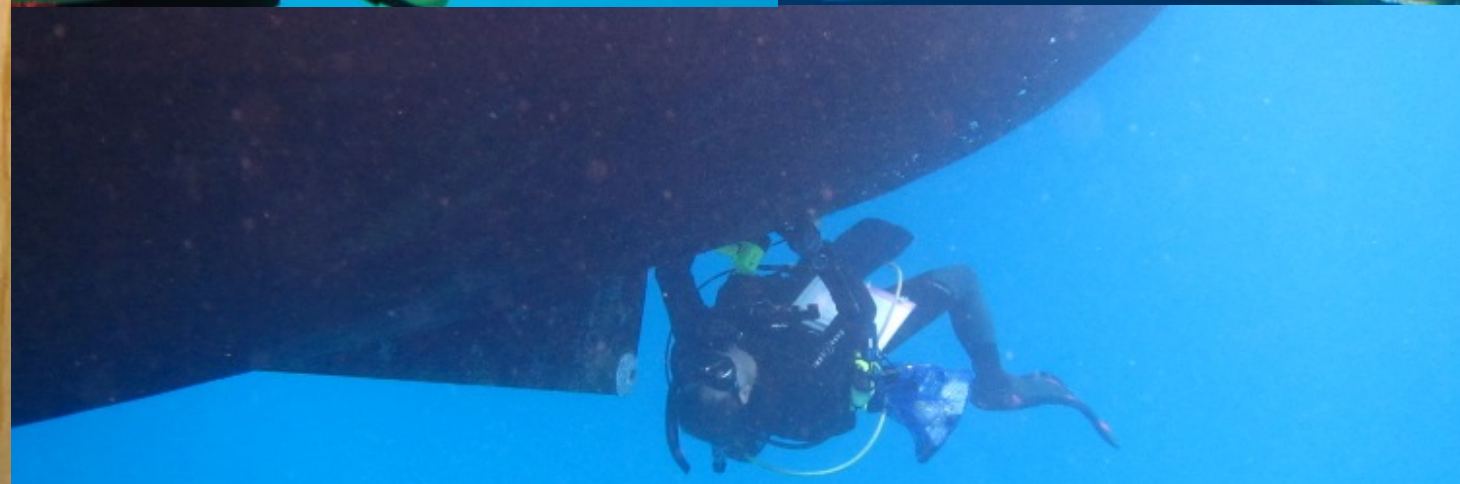
-Topics:

1. Impacts of aquatic invasive species and importance of filling a major biosecurity gap
2. Impacts of VIDA to state/federal agencies and maritime industry
3. Capacity needs to co-enforce VIDA with USCG and address other vessel type (e.g. recreational vessel) biosecurity risks


Biologist V
(Program Manager)
Oversees program.
Program Specialist IV
(Legal Advisor)
Develops regs/rules/policy, analyzes policies affecting BW/BF policies in the State, nationally, and internationally.
CREO IV
(Enforcement Liaison)
Works with the USCG and field team to attend vessel boardings, maintain chain of custody for samples and enforce penalties for violations.
Biologist IV
(Lab QA/QC Officer)
Develops TQAPPs, maintains lab safety and quality to meet ISO standards for BW compliance testing.
Biologist IV (Field Team Supervisor)
Maintains all BW/BF field equipment including SCUBA gear, spearheads projects with Database Specialist II, oversees field/lab specialists during BW compliance testing and biofouling inspections and IWCC system certification testing.
General Professional IV
(Data Specialist)
Develops, manages, and maintains reporting form database and technology used during ballast water inspections. Co-leads drafting of reports.
Biologist III
(Lab Tech.)
Biologist III
(Lab Tech.)
Lab crew member for projects related to BW/BF prevention efforts AND monitoring/ detection/
Biologist III
(Field Tech.)
Biologist III
(Field Tech.)
BW/BW vessel inspections, field crew member for projects related to BW/BF prevention efforts AND

DOT/DLNR VIDA Fact-Finding Meeting

DOT/DLNR VIDA Fact-Finding Meeting



Timeline of Events

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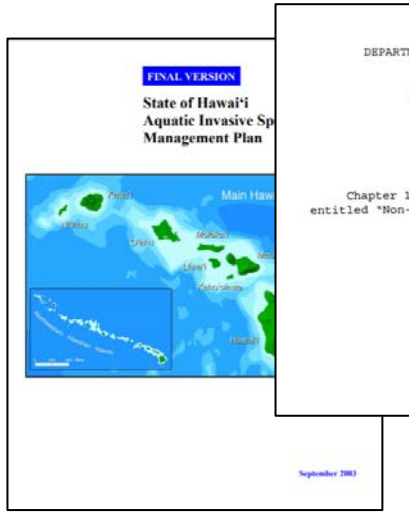
AAOTF
Act 237

2000
HRS
§187A-32

2003
DLNR, DAR
AIS Management
Plan


FINAL VERSION

State of Hawai'i
Aquatic Invasive Sp
Management Plan

Main Haw

Chapter 1
entitled "Non-

September 2003

THE SENATE
THIRTIETH LEGISLATURE, 2020
STATE OF HAWAII

S.B. NO. 2935 S.D. 1

A BILL FOR AN ACT

RELATING TO AQUATIC BIOSECURITY.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:

SECTION 1. The legislature finds that the introduction and spread of alien aquatic organisms poses an unprecedented threat to Hawaii's marine, estuarine, and freshwater ecosystems, maritime and recreational activities, and economy. Alien aquatic organisms can outcompete native species, leading to the collapse of native ecosystems and negatively impact the resilience of coral reefs to climate change. In order to combat the introduction and spread of alien aquatic organisms it is imperative that the State assess and manage the pathways of introduction and spread.

The introduction of alien aquatic organisms may occur through different pathways such as the release of unmanaged or improperly managed ballast water, the spawning or budding of species carried to state waters as vessel biofouling, or the cleaning of fouling organisms from vessel hulls where they may then become established, the arrival of species carried on marine debris that washes ashore, and the escape or release of

2020-1284 SB2935 SD1 SMA.doc

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2018
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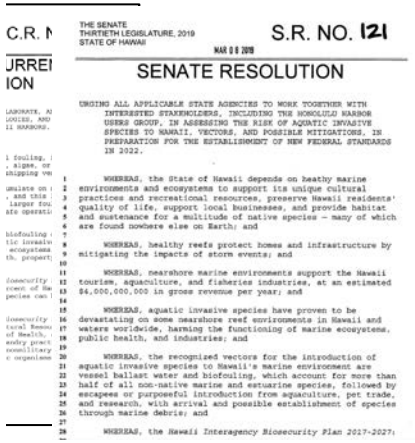
18-1

2018
VIDA

2019
HI Aquatic
Biosecurity
Resolution
SR121

2019
DOT/DLNR
VIDA Fact-
Finding Meeting

2020 Aquatic
Biosecurity Bill
Introduced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THE SENATE
THIRTIETH LEGISLATURE, 2019
STATE OF HAWAII

S.R. NO. 121

SENATE RESOLUTION

URGING ALL APPLICABLE STATE AGENCIES TO WORK TOGETHER WITH INTERESTED STAKEHOLDERS, INCLUDING THE HONOLULU HARBOR USERS GROUP, IN ASSESSING THE RISK OF AQUATIC INVASIVE SPECIES TO HAWAII, VECTORS, AND POSSIBLE MITIGATIONS, IN PREPARATION FOR THE ESTABLISHMENT OF NEW FEDERAL STANDARDS IN 2022.

WHEREAS, the State of Hawaii depends on healthy marine environments and ecosystems to support its unique cultural practices and recreational resources, preserve Hawaii residents' quality of life, support local businesses, and provide habitat and sustenance for a multitude of native species – many of which are found nowhere else on Earth; and

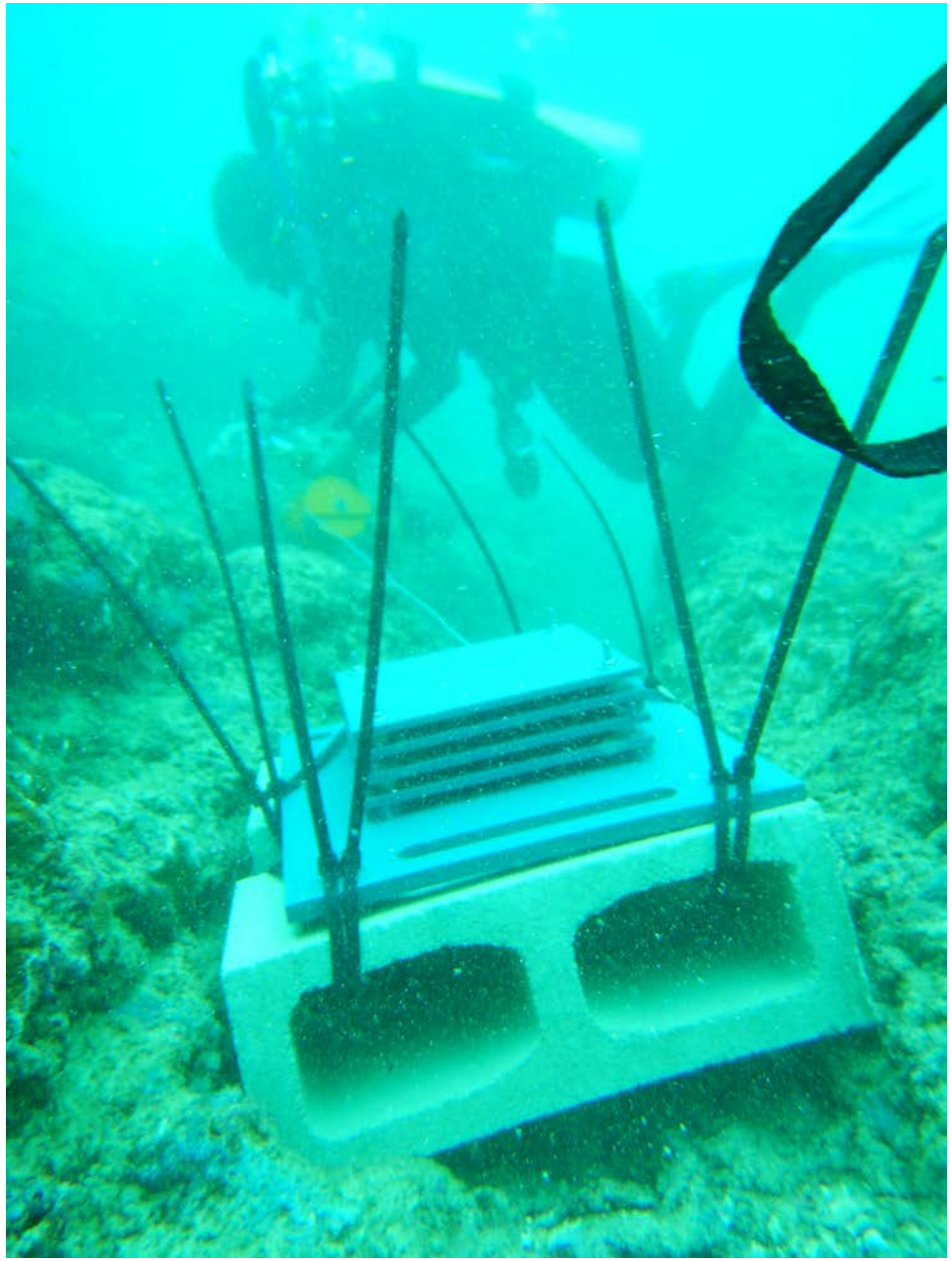
WHEREAS, healthy reefs protect homes and infrastructure by mitigating the impacts of storm events; and

WHEREAS, nearshore marine environments support the Hawaii tourism, aquaculture, and fisheries industries, at an estimated $4,000,000,000 in gross revenue per year; and

WHEREAS, aquatic invasive species have proven to be devastating on some nearshore reef environments in Hawaii and waters worldwide, harming the functioning of marine ecosystems, public health, and industries; and

WHEREAS, the recognized vectors for the introduction of aquatic invasive species to Hawaii's marine environment are vessel ballast water and biofouling, which account for more than half of all non-native marine and estuarine species, followed by escapees or purposeful introduction from aquaculture, pet trade, and research, with arrival and possible establishment of species through marine debris; and

WHEREAS, the Hawaii Interagency Biosecurity Plan 2017-2027;



KUO, DLNR


BOLD

THE SENATE
THIRTIETH LEGISLATURE, 2020
STATE OF HAWAII

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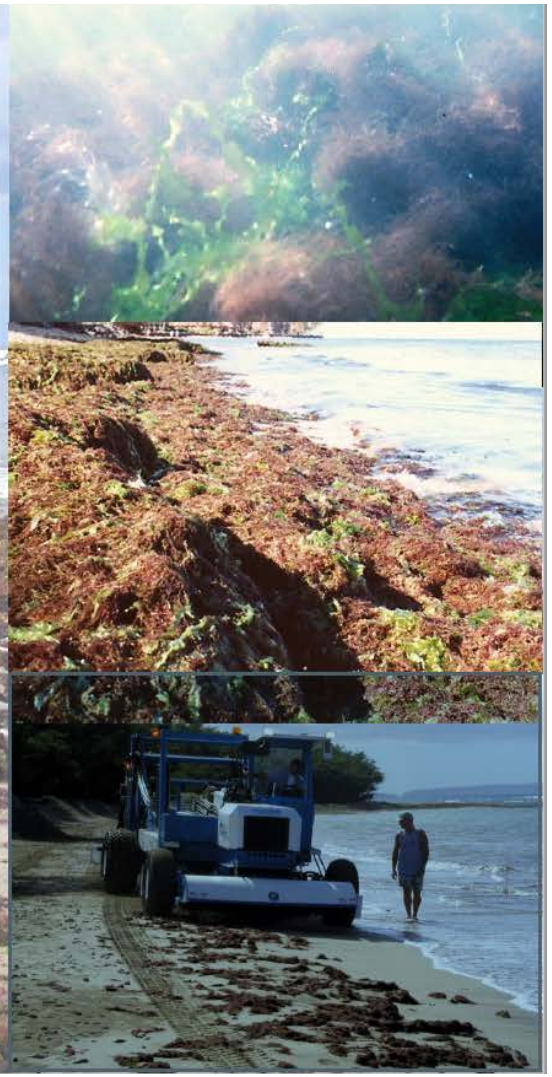
Aquatic Invasive Species Impacts

Impacts of *Hypnea musciformis* on Maui

- 20,000 lbs of algae washed up on Kihei beaches each week
- >$100,000 / yr to clean beaches
- Economic study – algal biomass in north Kihei cost more than $20 million / yr
  - Loss in rental income, decrease in property values & clean-up
- Ecological impacts -smothering and overgrowth



Aquatic Invasive Species Impacts

https://www.civilbeat.org/2019/08/papahanaumokuakea-the-reefs-werent-damaged-they-were-just-gone/

HDOT Harbor's Deputy Director Chow

- That the DOT Harbors Division is committed to protecting the environment and supporting VIDA actions, including revised [Aquatic Biosecurity – SB 2935.SD1.] bill that was earlier heard in this year's legislative session.
- Would like to discuss how the current focus on dealing with the coronavirus and how the economic impacts affect the State of Hawaii's ability to participate in VIDA.

Call-to-Action

1) State agency engagement on VIDA
   - Provide public comment proposed EPA discharge standards (Summer 2020)
   - Participate in EPA/USCG state consultation meetings (Aug 2020)
2) Governor's petition for:
   - State/USCG co-enforcement of VIDA standards
   - Amending standards unprotective of Hawaii aquatic resources
   - No-discharge zone application
3) Personnel and budget requirements to manage top biosecurity gaps: ballast water and vessel biofouling
   - Open to suggestions

References

- General Info on VIDA - https://www.epa.gov/vessels-marinas-and-ports/vessel-incidental-discharge-act-vida
- EPA VIDA Overview (May 7, 2019) - https://www.epa.gov/sites/production/files/2019-06/documents/webinar_final_slides.pdf
- VIDA Public Listening Session Discharge (May 20, 2019) - https://www.epa.gov/sites/production/files/2019-06/documents/vida_discharge_presentations_may_2019.pdf
- USCG Ballast Water Regulations and general VIDA info - https://www.dco.uscg.mil/Our-Organization/Assistant-Commandant-for-Prevention-Policy-CG-5P/Commercial-Regulations-standards-CG-5PS/Office-of-Operating-and-Environmental-Standards/Environmental-Standards/
- Coral Disease - https://www.sciencenews.org/article/mysterious-coral-disease-ravaging-caribbean-reefs
- https://wdfw.wa.gov/sites/default/files/publications/01837/wdfw01837.pdf
- https://www.civilbeat.org/2019/08/papahanaumokuakea-the-reefs-werent-damaged-they-were-just-gone/


MAHALO!

Outline of potential biosecurity video projects

Potential Biosecurity Video Projects

HISC staff took ʻŌlelo media production training in 2019

Access to high-quality video production equipment

Free broadcast on local access television channels

Online hosting through HISC accounts

Public Service Announcement(s)

- Focused on encouraging pest reporting
- Use of 643-PEST phone hotline, 643pest.org, 643PEST mobile app
- 60-90 second video product
- Utilizing little fire ant and coconut rhinoceros beetle costumes

Biosecurity Miniseries

Three 10-15 minute episodes: preborder, border, postborder

A behind-the-scenes look the biosecurity work done by agencies and partners

Primarily field shots and interviews

Public Comments

Adjournment