

**Advocating “Restoration for
Restoration’s Sake”:
Challenges to Marine Restoration
and Submerged Lands Leasing
in Massachusetts**

Kate Killerlain Morrison
The Nature Conservancy

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(K. Crisley, TNC)

Overview

- Submerged lands leasing structure
- Wellfleet Bay oyster restoration case study
- Challenges to submerged lands leasing and marine restoration
- Next Steps: Science informing policy changes

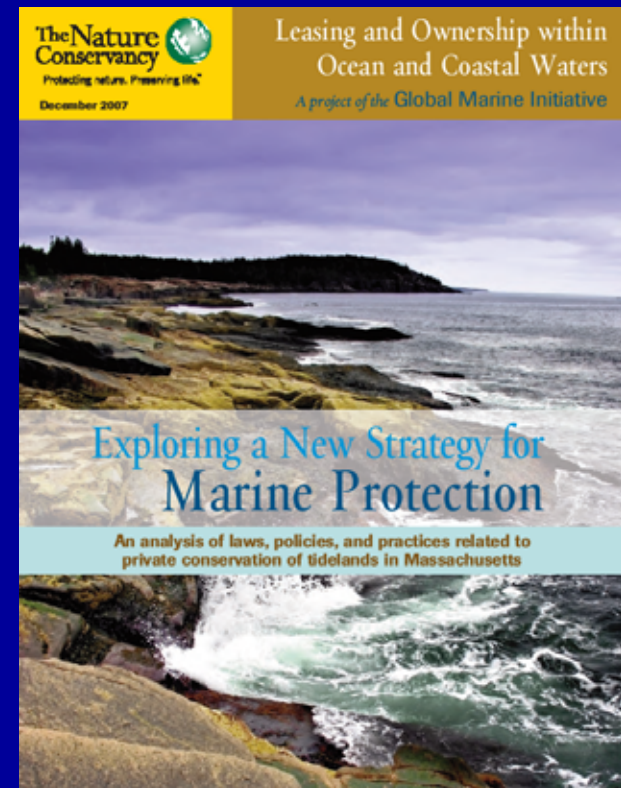
Submerged lands leasing structure

We're exploring *licensing*, rather than leasing, in
Massachusetts

Cannot obtain a “lease” that
conveys ownership (b/c the
state is owner)

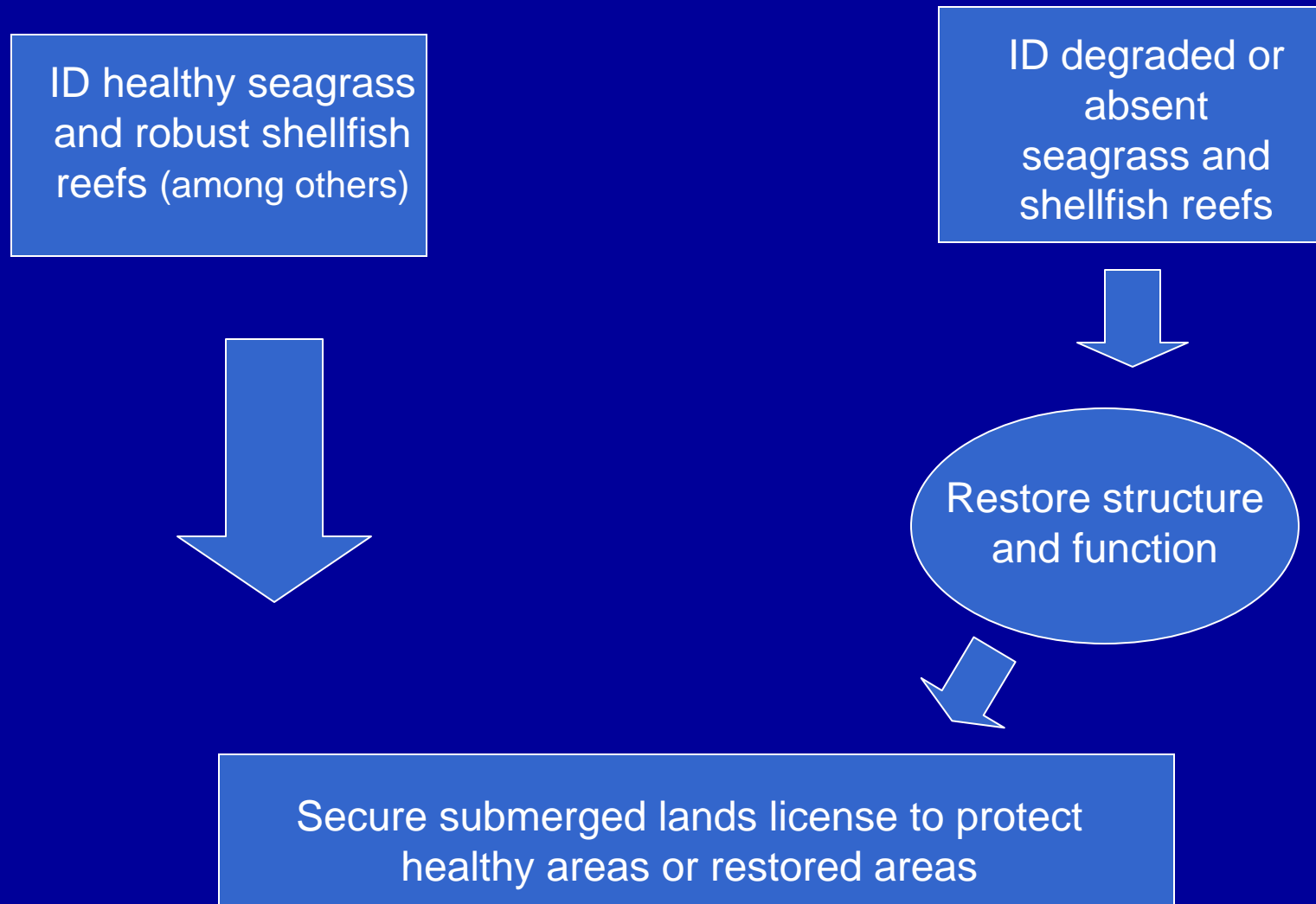
but

can possibly secure a
“license” for permission to
use (or not use)

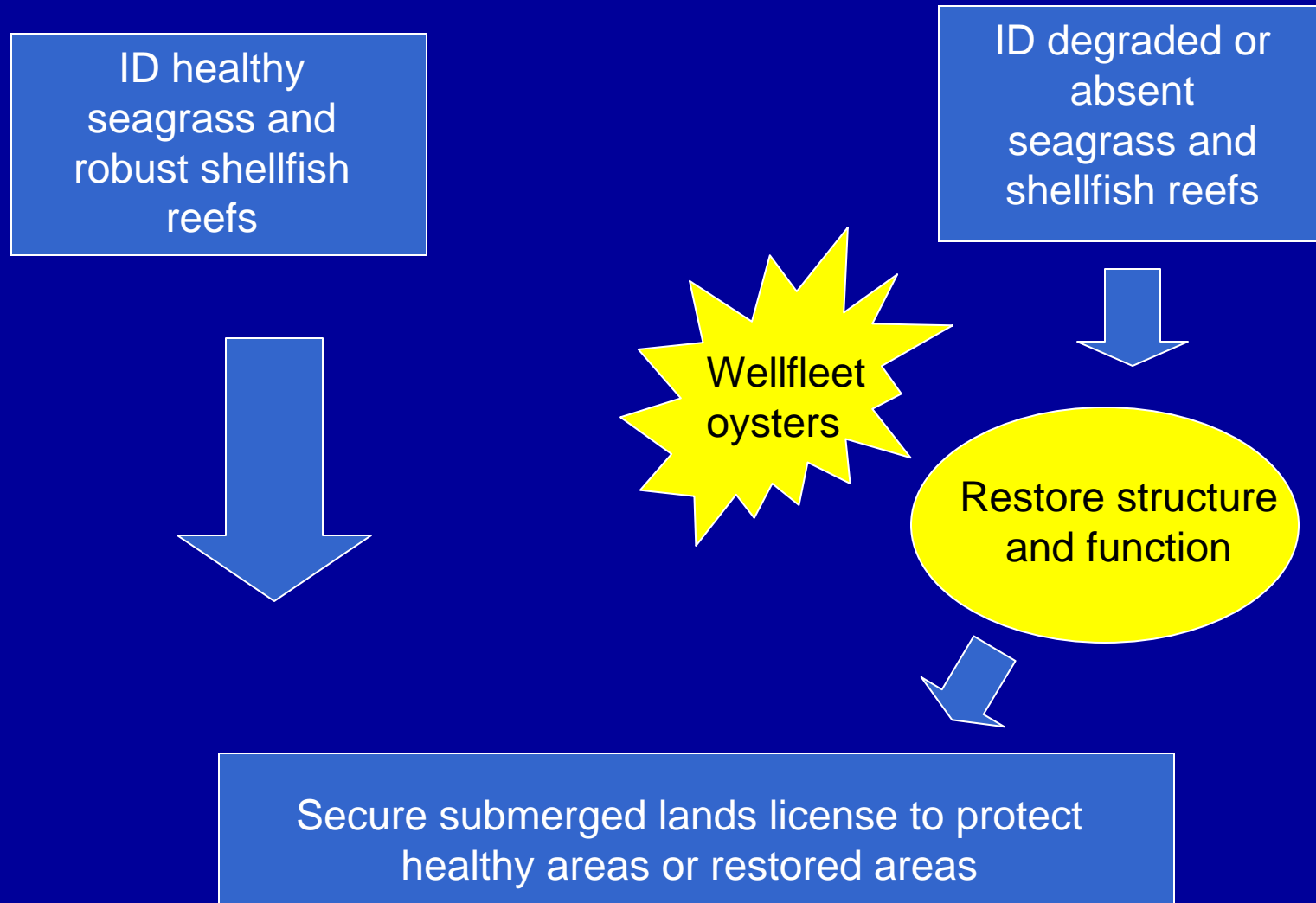


Submerged Licensing v. Restoration

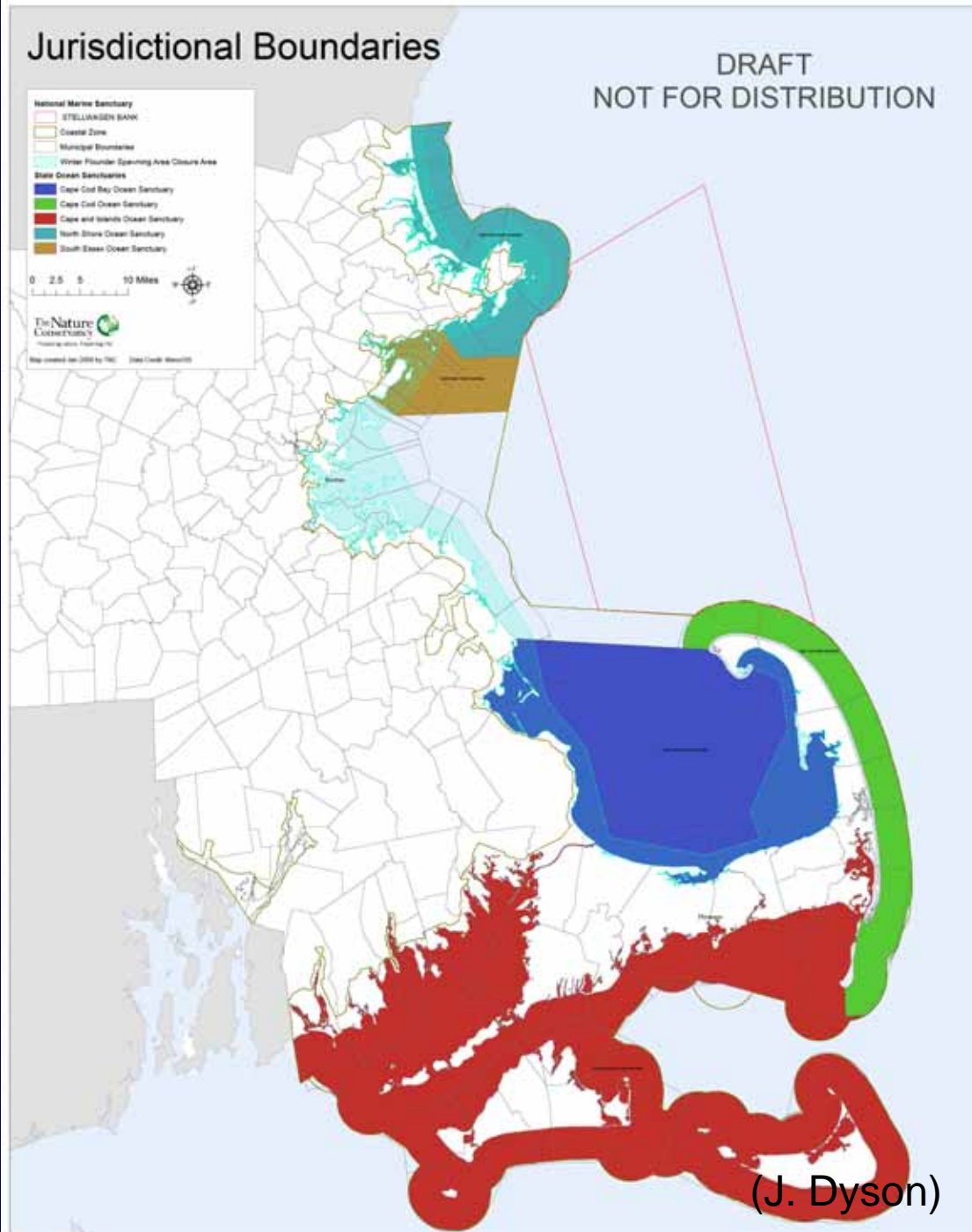
Two separate (yet related) tracks:



Submerged Licensing v. Restoration

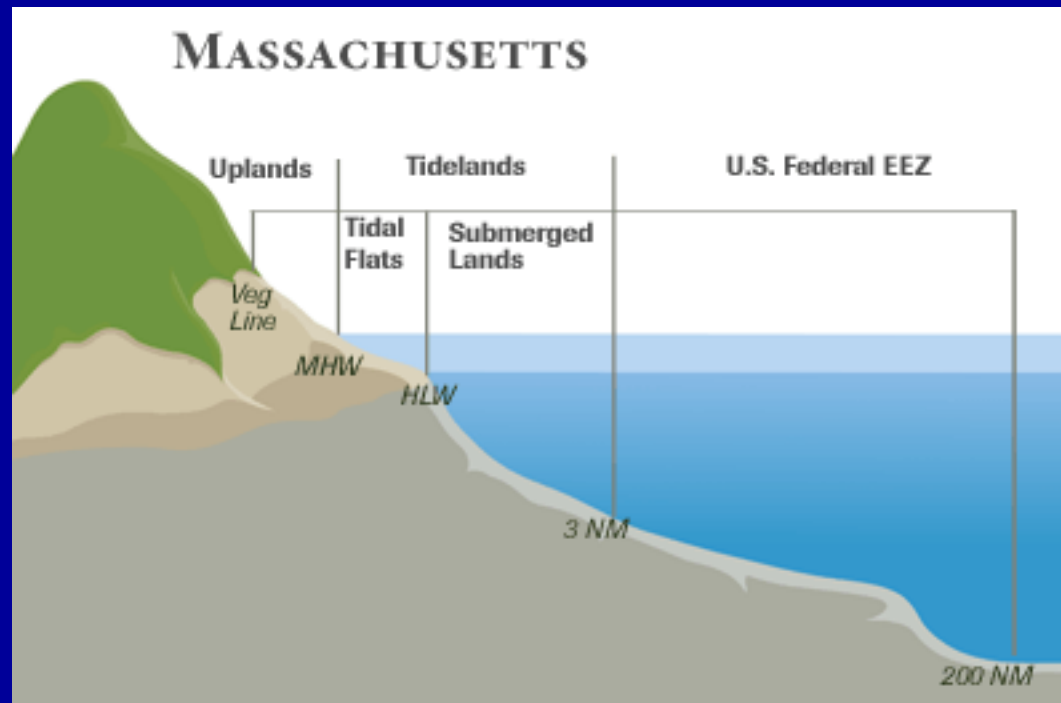


Who owns the seafloor?



In MA, two types of tidelands:

- (1) Filled tidelands
- (2) Flowed tidelands



(1) Filled Tidelands

- Dry areas that used to be subject to tidal action until we filled them
- Still subject to public trust rights (i.e. access)
- Boston Harbor waterfront, Back Bay, etc.



(2) Flowed Tidelands

- Wet areas that are still wet and subject to tidal action
- Private tidelands extend from MHW line out to the historic low water line or 1,650 feet, *whichever is landward*
- Private tidelands usually belong to the adjacent upland owner



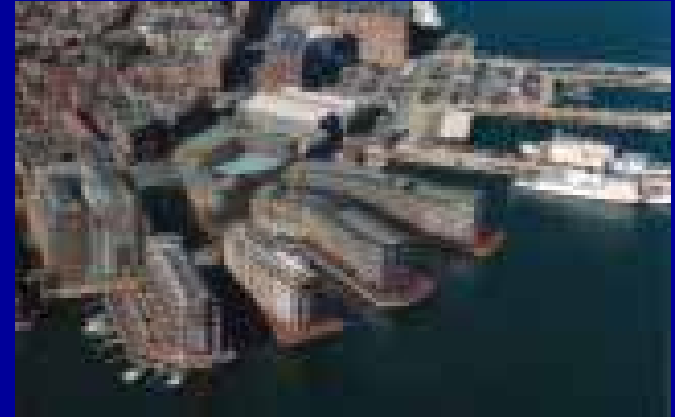
Public Trust Rights prevail across all tidelands

*“The sea and the seashore are open to all **and should not be appropriated for private use.**”*

Roman Emperor Justinian (527-565 AD)



But wait...



- These licensed uses are private and received variances
- But marine restoration/submerged lands projects receive higher scrutiny due to silent regs

What allows us to **restore** areas? Nothing explicitly...

If we... plant seagrass	We trigger... Wetlands Protection Act	Altering Land Under the Ocean; ok to mitigate from development; has marsh standards
If we... grow shellfish	We trigger... c.130 fisheries and aquaculture	Possessing shellfish larvae and shellfish; need to harvest

What allows us to **protect** areas?
Nothing explicitly...

License for non-use or reduced level of use; “occupying the tidal flat”	c.91 (Public Waterfront Act) tidelands license (given for docks, piers, jetties)
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No clear mechanism exists to allow the
state to say “yes”

When assessing potential mechanisms for submerged lands licensing, elements to consider include:

- What are the rights afforded to the owner or licensee?
- Can we get the full bundle of sticks?
- If not, are just some of the sticks enough for effective conservation?

Assessing the bundle of sticks:

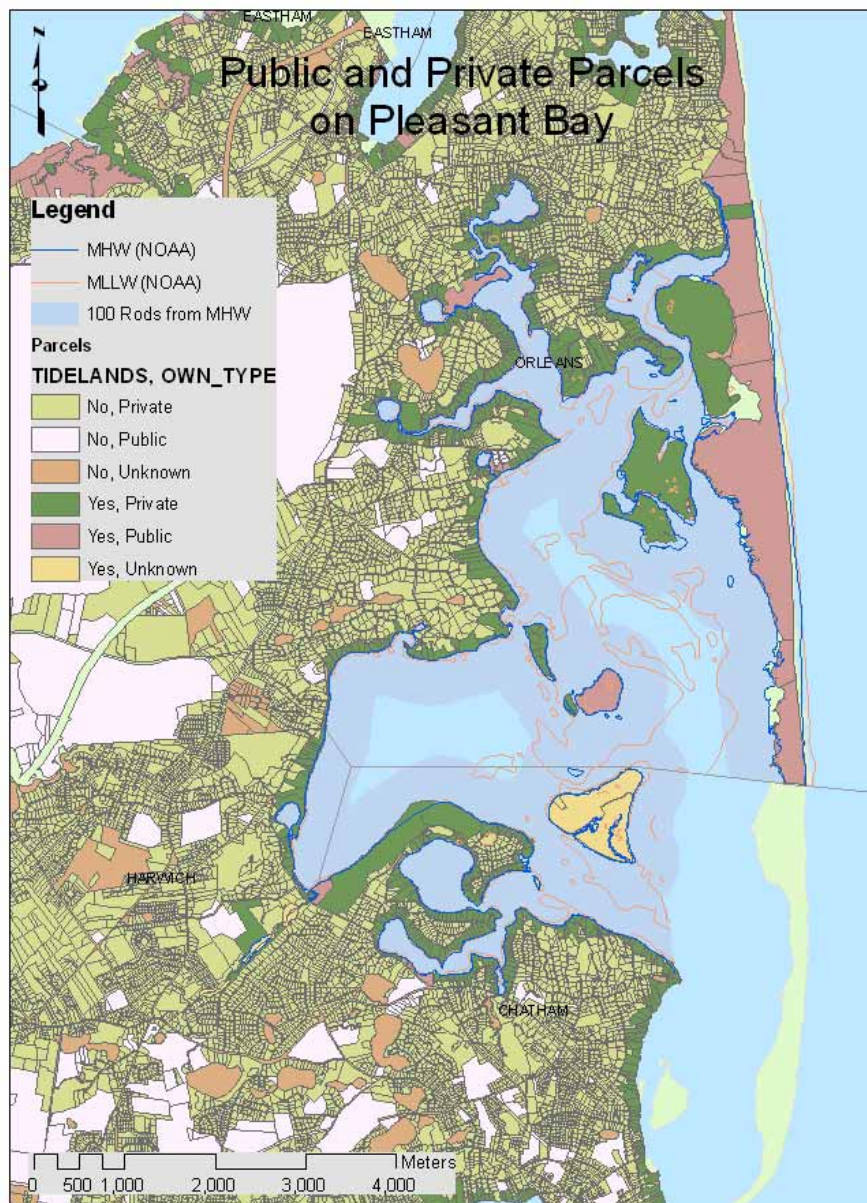
(1) Permissible uses and exclusivity

(2) Productive use requirement

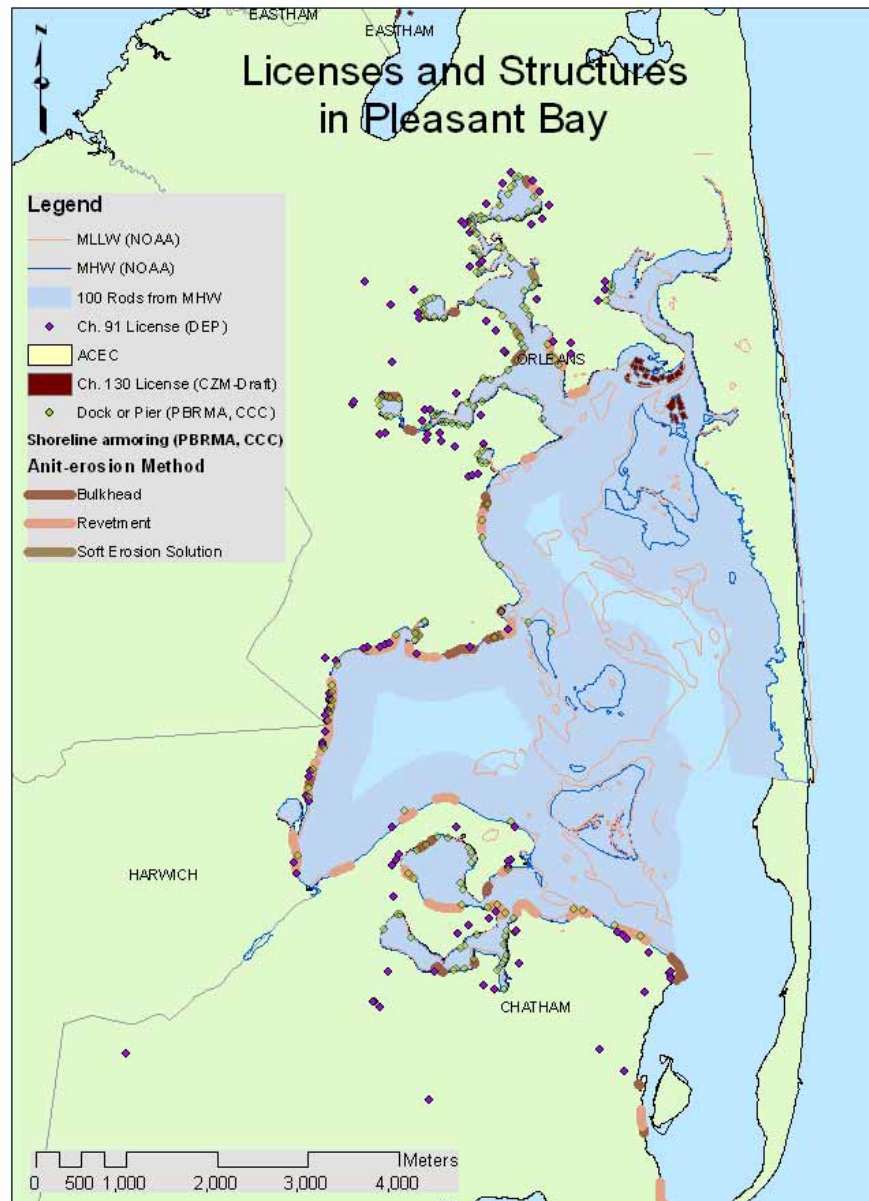
(3) Duration

(4) Proponent Capacity

(5) Geographic scope



Compiled and edited by The Nature Conservancy, Massachusetts Marine Land Pilot Project, August 2006. For illustration purposes only. This map may contain errors.



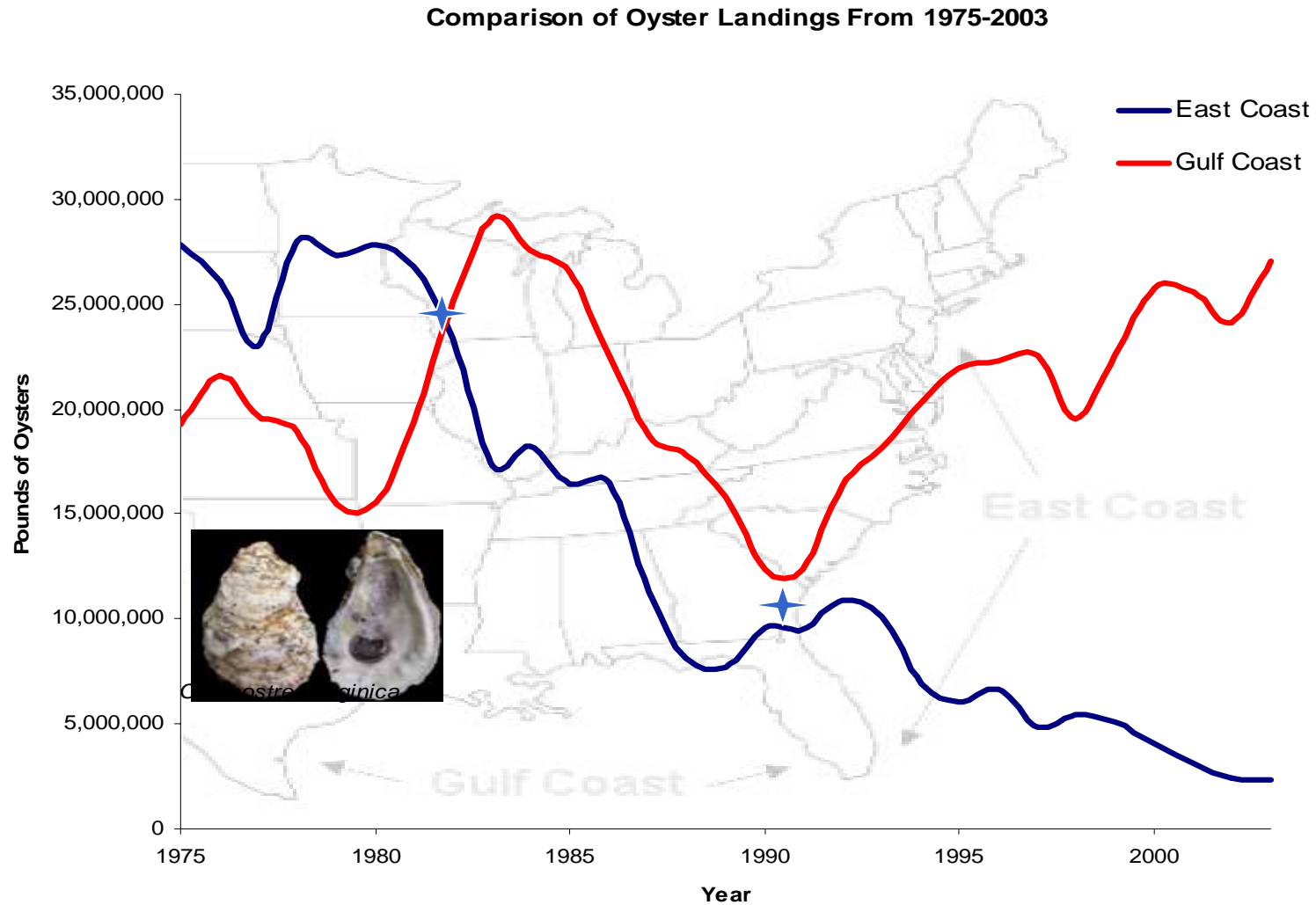
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Wellfleet Bay oyster restoration case study

Why Shellfish?



Major drop in east coast landings



Ecosystem Services Provided by Shellfish

Regulating

- Protection of beaches and coastlines from storm surges and waves.
- Water quality maintenance
- Reduction of marsh shoreline erosion
- Stabilization of submerged land by trapping sediments

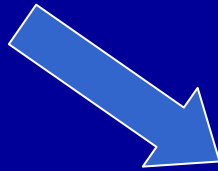
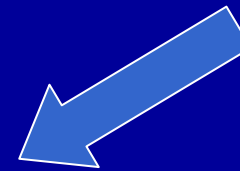


Photo: Diana Garland, TNC Volunteer

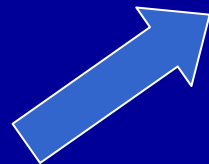
Provisioning

- Subsistence and commercial fisheries
- Aquaculture
- Fertilizer and building materials (lime)
- Jewelry and other decoration (shells)



Supportive

- Cycling of nutrients
- Nursery habitats



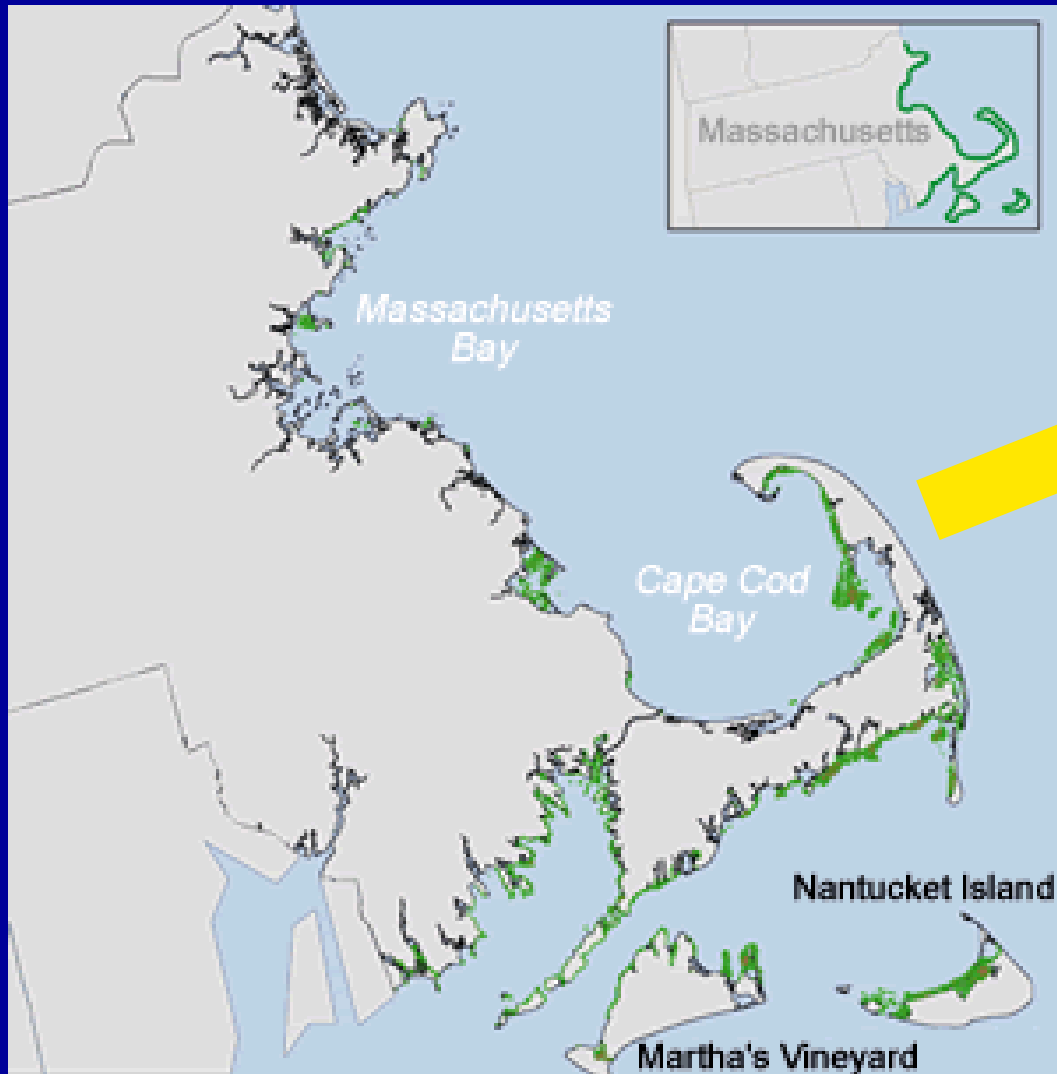
Cultural

- Tourism and recreation
- Symbolic of coastal heritage



Wellfleet Bay Oyster Restoration Project

NOAA/TNC Community Restoration Grant Award
with MassAudubon as partner



Two acres of the total 234 acres of intertidal land owned by Mass Audubon

Wellfleet Bay Oyster Restoration Project Permitting Process

- There is no shellfish restoration permit
- Town R&D aquaculture permit denied
- Special state discretionary permit denied
- MassAudubon and TNC will operate as an agent of the Town of Wellfleet on the town's annual shellfish propagation permit



Experimental Harvest Plan

- In MA, shellfish beds can only be closed for up to three years (so what happens in year 4?)
- Use monitoring data to establish MSY
- Want to inform future sustainable harvest



Lessons Learned

- Build relationships before asking for something
- Review past positions
- Consistent messaging prevents red flags
- Have criteria for good restoration sites
- Early and on-going engagement leads to ownership (i.e. Project Advisory Committee)

Challenges to submerged lands leasing and marine restoration

Challenges to submerged lands leasing and marine restoration

- Will a c.91 license give us the protections we want? Exclusivity?
- Dialogue on habitat conversion and species tradeoffs not mature
- Productive use requirements for shellfish
 - need to harvest
- Can we take this to scale?
 - Limits on total shellfish acreage an individual can hold
 - Shellfish beds can only be closed for 3 year periods

Next Steps:
Science informing policy changes

Next Steps: Submerged Lands Licensing

Science informing policy changes



Internal planning to ID
appropriate areas

Apply for c.91 license
for non-use (“wildlife
habitat” as water-
dependent use)

If denied, use as test
case for reg change

Next Steps: Wellfleet Oyster Restoration

Science informing policy changes



Assess treatments that work best in northeast

Monitoring data on oyster demographics, bird, juvenile fish and invert use


Develop criteria for reg review of future projects

Informs Experimental Harvest Plan for L-T changes in shellfish mgmt

Supports argument for habitat as a productive use

Next Steps: Statewide Marine Restoration

Science informing policy changes



Assess suitable habitat areas to ID future restoration sites (e.g. eelgrass)

Provide data and discuss habitat conversion and species tradeoffs

Pre-screening streamlines permitting

Informs mitigation packages

Technical guidance and/or reg change

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