

Maine Department of Marine Resources



Commissioner's Office



Commissioner

Patrick Keliher

patrick.keliher@maine.gov



Deputy Commissioner

Meredith Mendelson

meredith.mendelson@maine.gov



State Marine Policy Director

Deirdre Gilbert

deirdre.gilbert@maine.gov

DMR's Statutory Mission

- MRS Title 12 §6021 Purpose:
 - Conserve & develop marine & estuarine resources
 - Conduct & sponsor scientific research
 - Promote & develop the Maine coastal fishing industries
 - Advise & cooperate with local, state, and federal officials concerning activities in coastal waters
 - Implement, administer and enforce the laws and regulations necessary for these purposes

Maine's Marine Resources

- More than 70 marine, estuarine, or diadromous species are harvested commercially, caught by recreational anglers, or raised by aquaculturists
- In 2019, landed value was \$673 million, with a final value to Maine's economy estimated at nearly \$1.8 billion
 - 167 wholesale distributors, processors, wharfs, pounds, and co-ops, and licensed lobster dealers contributed an estimated \$967,675,313 – nearly \$1 billion – to the Maine economy, according to a 2017 report, and supported more than 5,500 jobs in 2016
- Over 13,000 commercial harvesters and 1,200 dealers
- In Maine, 236,650 recreational anglers made 572,807 fishing trips, contributing an estimated \$130 million to Maine's coastal economy (2016)

Top Ten Ports in 2019 by Ex Vessel Value

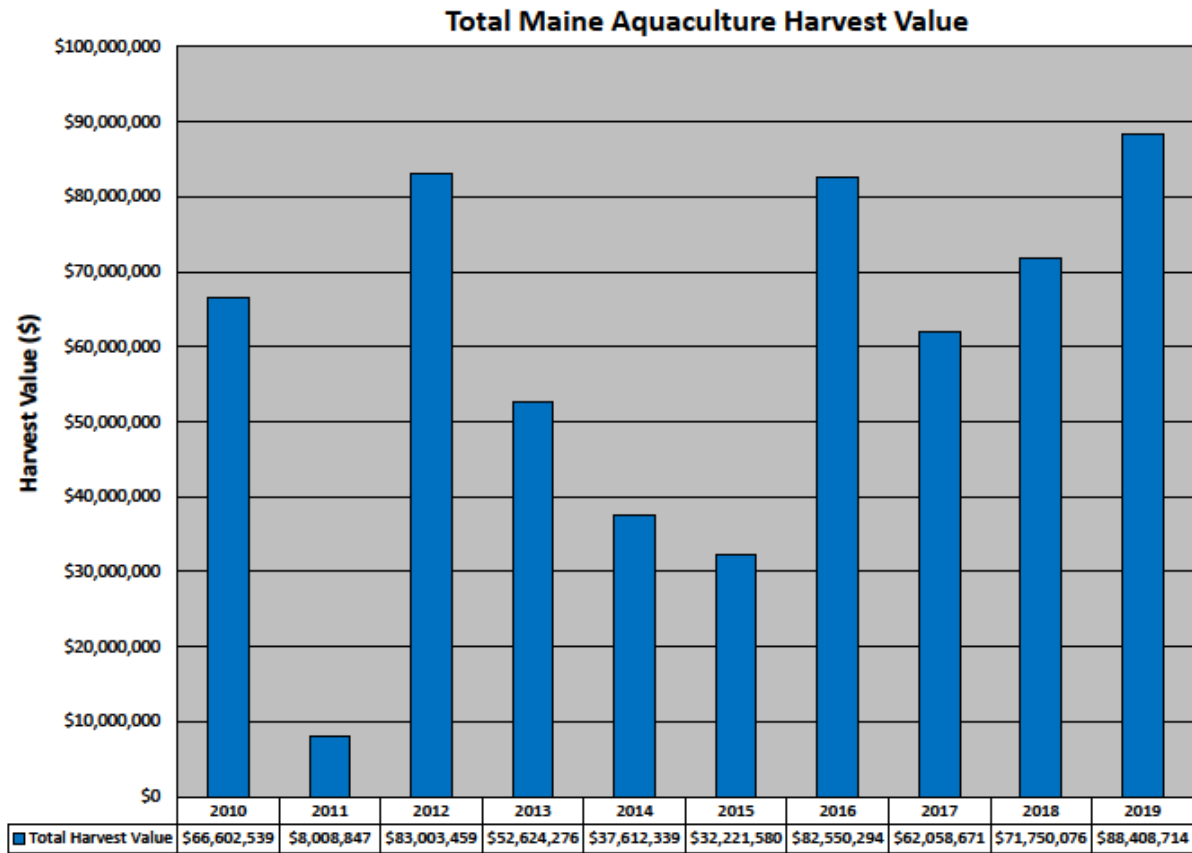
1. Stonington	\$50.89 million
2. Vinalhaven	\$39.74 million
3. Portland	\$25.27 million
4. Friendship	\$24.33 million
5. Beals	\$22.73 million
6. Spruce Head	\$18.69 million
7. Bass Harbor	\$13.44 million
8. Harpswell	\$13.21 million
9. Jonesport	\$13.16 million
10. Owls Head:	\$13.02 million

Top Ten Species (Wild Harvest)

2019 LANDED VALUE (millions)

1.	Lobsters	\$485 m
2.	Elvers	\$20 m
3.	Soft Shell Clams	\$18 m
4.	Oysters	\$7.6 m
5.	Blood Worms	\$6.2 m
6.	Urchins	\$5.8 m
7.	Menhaden	\$5.8 m
8.	Atlantic Herring	\$5.7 m
9.	Tuna	\$4.38 m
10.	Scallops	\$4.35 m

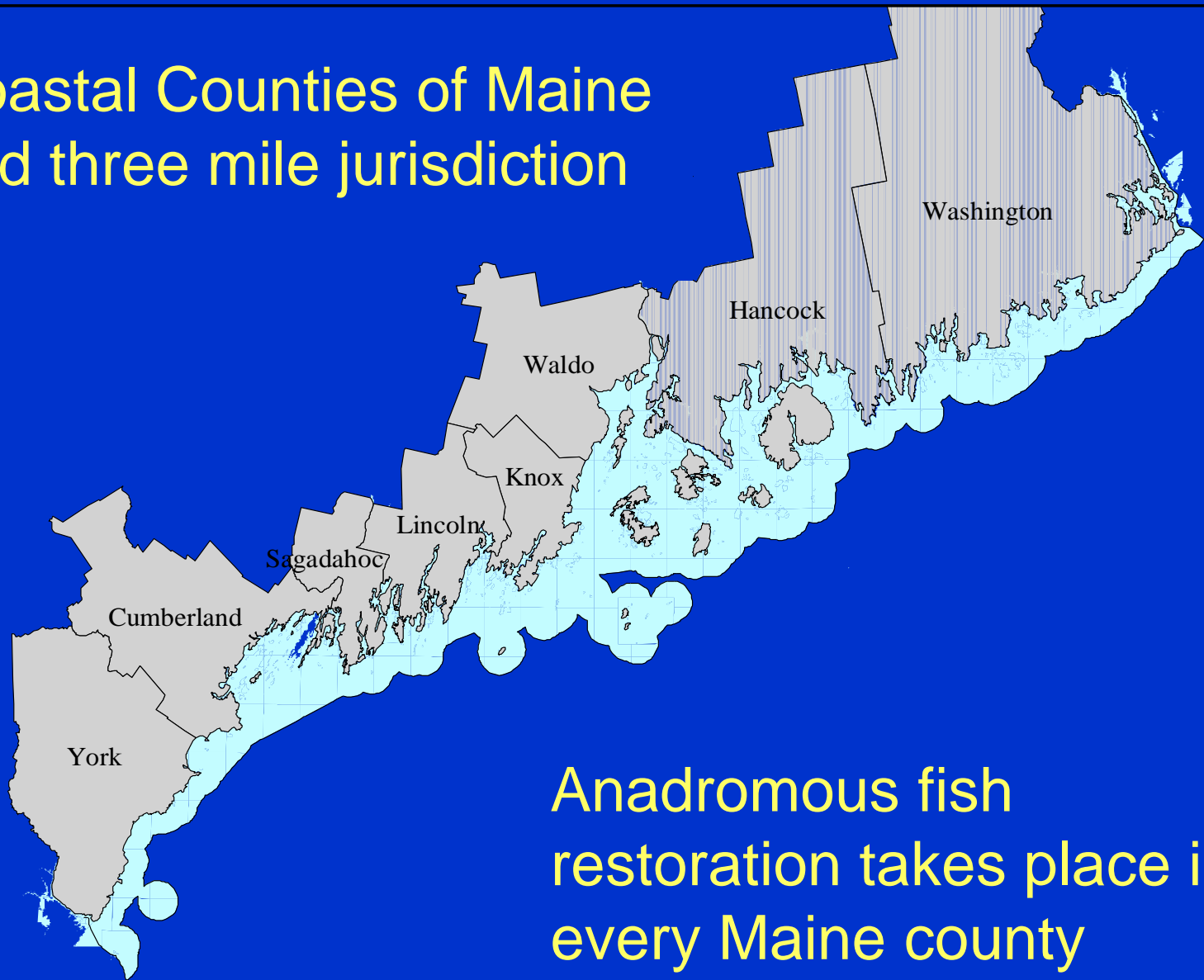
Aquaculture Value



Interstate and Federal Management

- Atlantic States Marine Fisheries Commission (**ASMFC**):
 - 15 Atlantic coastal states
 - 27 species managed
 - 3 Commissioners from Maine
- New England Fisheries Management Council (**NEFMC**):
 - 5 New England States (ME, NH, MA, RI, CT)
 - 10 FMPs for federal waters (outside of 3 miles) fisheries
- Interstate Shellfish Sanitation Conference (**ISSC**):
 - Develops water quality and health standards for shellfish
 - Maine must maintain compliance in order to ship shellfish interstate

Coastal Counties of Maine and three mile jurisdiction



Anadromous fish
restoration takes place in
every Maine county

Department Organization

- Bureaus:
 - Policy and Management
 - Aquaculture
 - Licensing
 - Maine Coastal Program
 - Marine Patrol
 - Marine Science
 - Sea Run Fisheries
 - Biological Monitoring & Assessment
 - Public Health

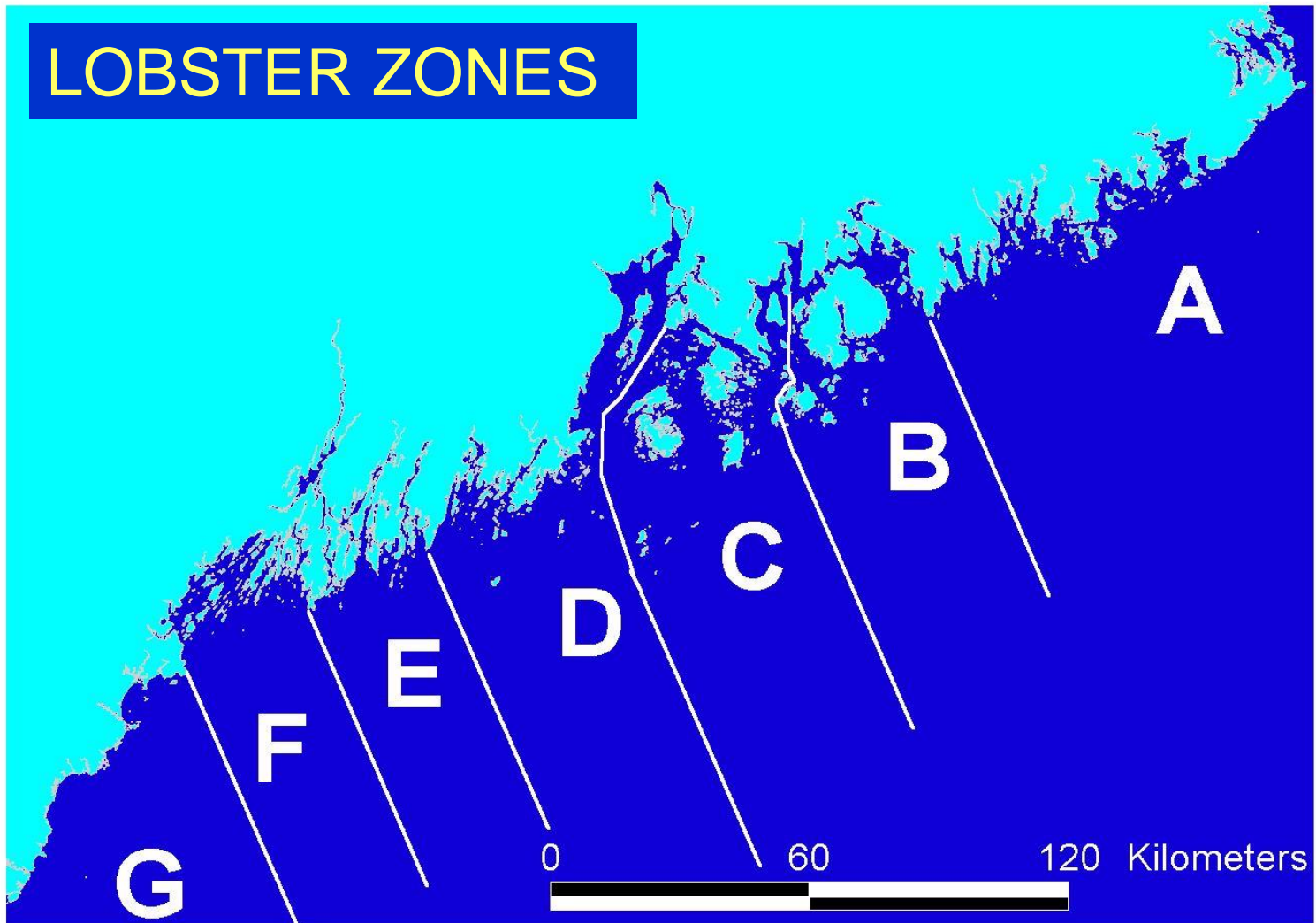
BUREAU OF POLICY AND MANAGEMENT

- Develops policy initiatives at state, regional and federal management levels
- Staffs Advisory councils that provide input into management processes
- Administers public hearings for regulation changes
- Administers aquaculture lease process
- Administers licenses

Advisory Councils

- Vehicles for stakeholder input on management measures and research agendas:
 - DMR Advisory Council
 - Lobster Advisory Council
 - 7 Lobster Policy Management Councils
 - Sea Urchin Zone Council
 - Scallop Advisory Council
 - Commercial Fishing Safety Council
 - Aquaculture Advisory Council
 - Lobster Research, Education and Development Board
 - Shellfish Advisory Council

LOBSTER ZONES



Division of Aquaculture

- Administer LPAs and leases
- Conduct hearings
- Create site reports
- 707 active LPAs (2020)
- 63 active experimental leases (2020)
- 105 active standard leases (2020)

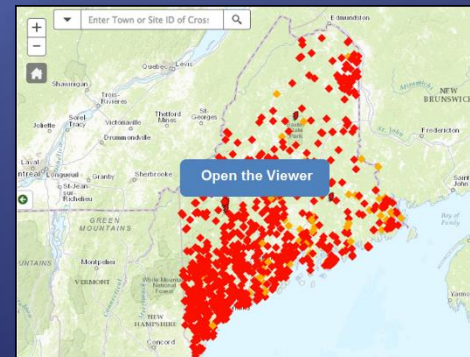
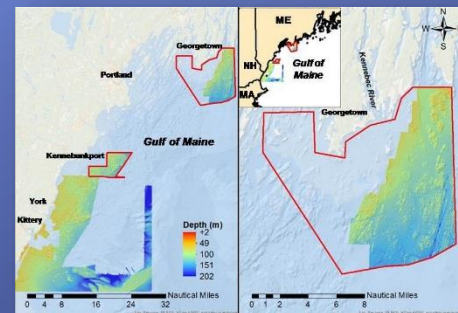


Maine Coastal Program

- Became a DMR program in 2017
- Authorized by Coastal Zone Management Act of 1972
- A networked program that focuses on coastal pollution remediation, climate adaptation, coastal habitat mapping, municipal planning and development, and working waterfront protection.
- Distributes Federal funds to enable projects that benefit Maine's coastal communities.

Maine Coastal Program Projects

- Coastweek 2019
 - Pounds cleaned – 2,754.5
 - Miles of waterfront cleaned – 101.5
 - Total volunteers - 746 (302 adults and 444 kids)
- Coastal Mapping Initiative
 - Critical data about the seafloor and oceanic environment
- Maine Stream Habitat Viewer
 - Displays habitats for several stream-dependent species important to Maine's economy, ecology and way of life



BUREAU OF MARINE PATROL

Marine Patrol's Mission

- Protect and Conserve Marine Resources
- Enforce Laws and Regulations Protecting Maine's Marine and Estuarine Resources

Enforcement Powers

- State Wide Jurisdiction
- Authority to Enforce All Laws of the State
- Authority to Enforce Title 12 Laws in Federal Waters
- Officers are federally deputized, per JEA agreement

Marine Patrol Officers - More Than Just Conservation Law Enforcement Officers



Homeland Security



Tactical Boat Operations



Search and Rescue



Dive Team



Whale Disentanglement

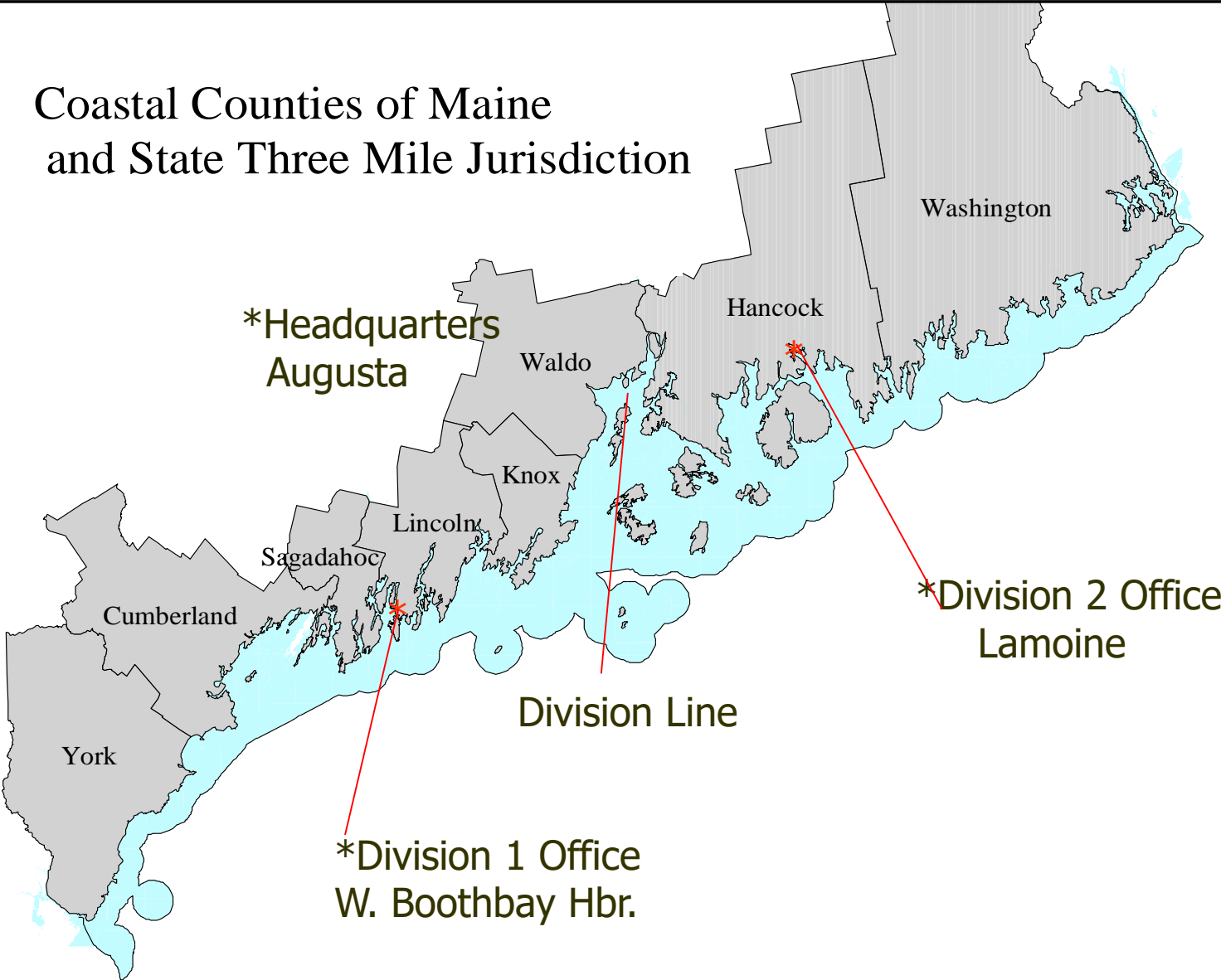


Federally Deputized Officers

Marine Patrol Assets



Coastal Counties of Maine and State Three Mile Jurisdiction



***Headquarters
Augusta**

Washington

Hancock

Waldo

Knox

Lincoln

Sagadahoc

Cumberland

***Division 2 Office
Lamoine**

Division Line

York

***Division 1 Office
W. Boothbay Hbr.**

BUREAU OF MARINE SCIENCE

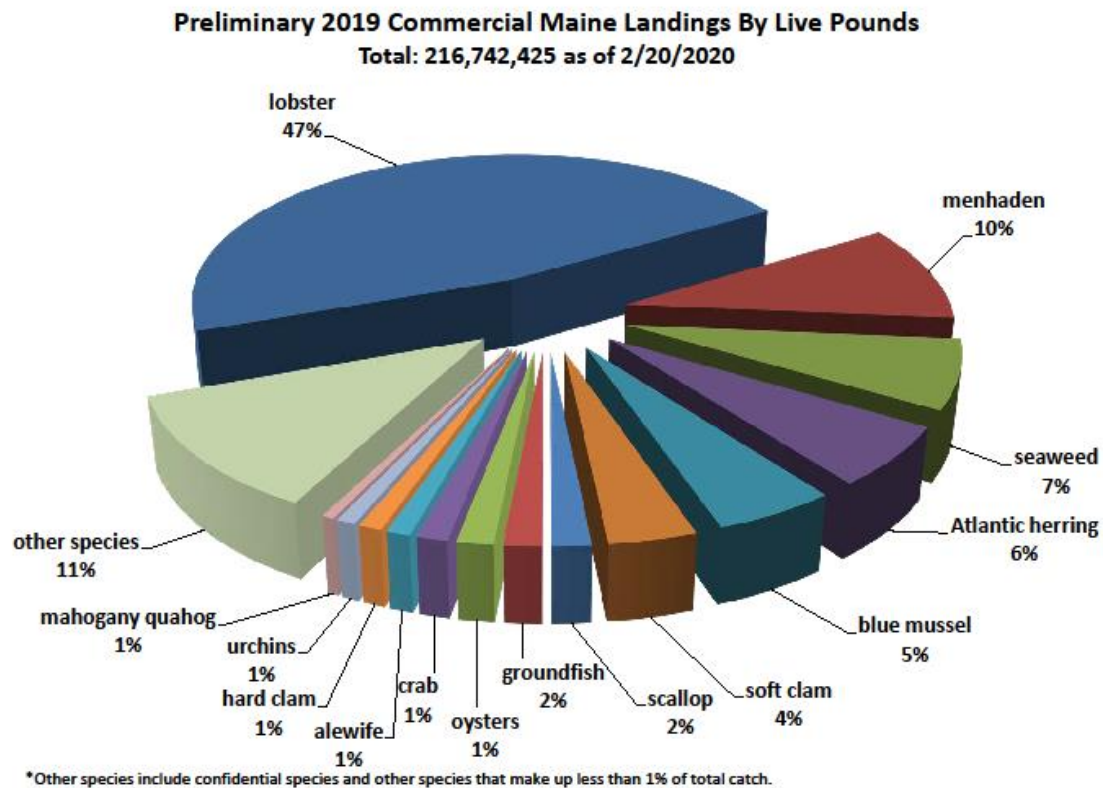


Bureau of Marine Science Mission

- Fishery research and monitoring
- Critical habitat protection
- Conservation, management, protection and restoration of diadromous fish populations to their historic range
- Marine resource education

Landings Program

- Who reports? Wholesale dealers and retailers buying directly from harvesters; harvesters in some fisheries



Why is Landings information important?

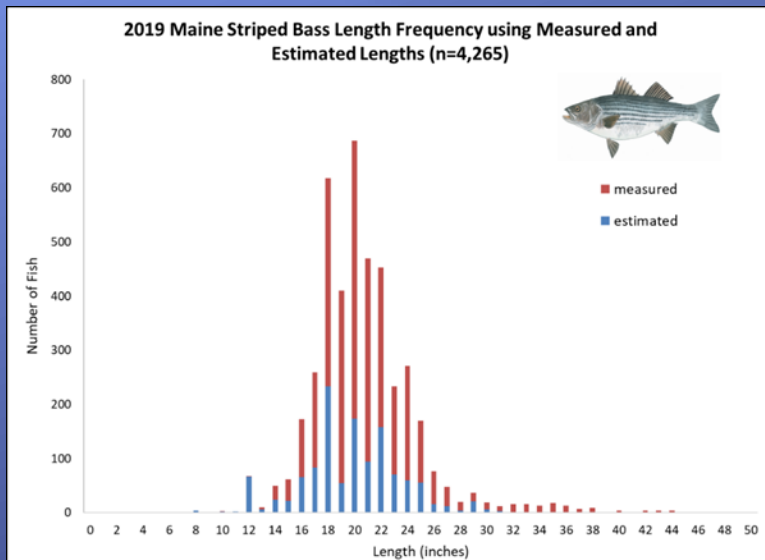
- Accurate and timely info = better management
- Forms the basis of understanding removals and allocating monitoring resources
- Quota monitoring
- Demonstrate the importance of Maine's fisheries (value, participation, seasonality)

Monitoring Programs

- Inshore Trawl Survey
 - 18 years of Spring & Fall surveys
 - Multispecies – groundfish, lobsters & bottom communities
 - Identifying annual trends, seasonal patterns
 - Used in up to 13 stock assessments
- Long-term commercial fishery monitoring programs
 - American Lobster
 - Atlantic Herring
 - Green Sea Urchin
 - Northern Shrimp
- Lobster Sampling Programs
 - Sea Sampling
 - Ventless Trap Survey
 - Juvenile Settlement Survey



Recreational Fisheries





Sea Run Fisheries & Habitat Mission

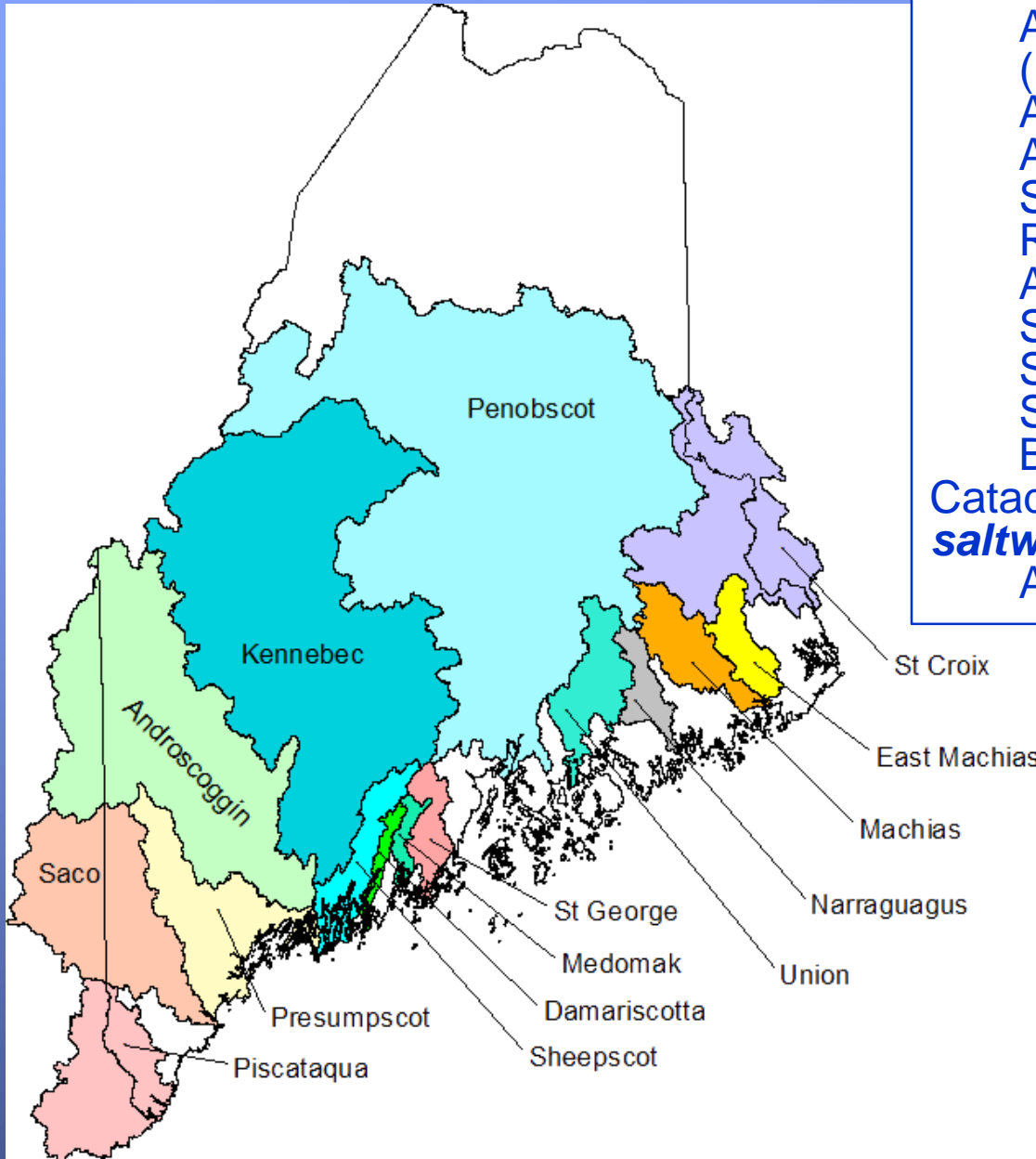
- To conserve, manage, protect and restore diadromous fish populations to their historic range;
- To secure sustainable recreational and commercial fisheries for diadromous species;
- To conduct and coordinate projects involving research, planning, management, connectivity, restoration and propagation.

Anadromous – **spawn in freshwater**

- Alewife/Blueback Herring (River Herring)
- American Shad
- Atlantic Salmon
- Striped Bass
- Rainbow Smelt
- Atlantic Tomcod
- Sea Lamprey
- Sturgeon (Atlantic and Shortnose)
- Brook Trout

Catadromous – **Spawn in saltwater**

- American Eel



Fish Conservation Activities



Alewife, Atlantic Salmon,
and Shad Stocking / Transfers



Assessments/Research



Habitat Restoration

Habitat Challenges

- Tremendous amount of Habitat Remains Inaccessible to Diadromous fish:
- Challenges include barriers, policy, money



Marine Education

Maine State Aquarium



- Touch tanks featuring regional marine species
- Daily events including tours of the DMR laboratory, sport fishing lessons
- Interactive computer kiosks
- Programs and resources for educators
- 45,000 visitors in 2018

Burnt Island Lighthouse



- Habitat and conservation education
- Public access
- Teacher recertification courses
- Educational programs in history, navigation, ecosystems, fisheries, art and music
- Living history museum
- Recreational opportunities

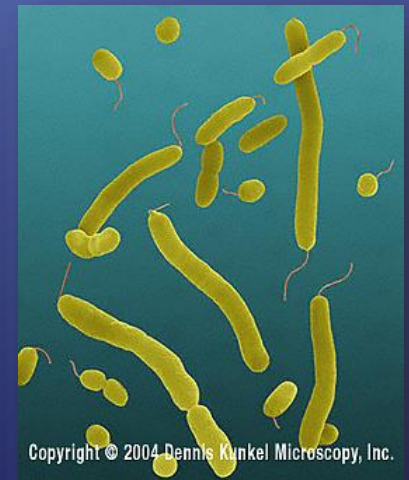
BUREAU OF PUBLIC HEALTH

- Growing Area Classification Program
 - water quality and biotoxin
- Shellfish Dealer Inspection Program
- Shellfish Management Program
 - Interface with municipal shellfish programs
 - Other resources; periwinkle, mussels, marine worms
- Environmental Permit Review



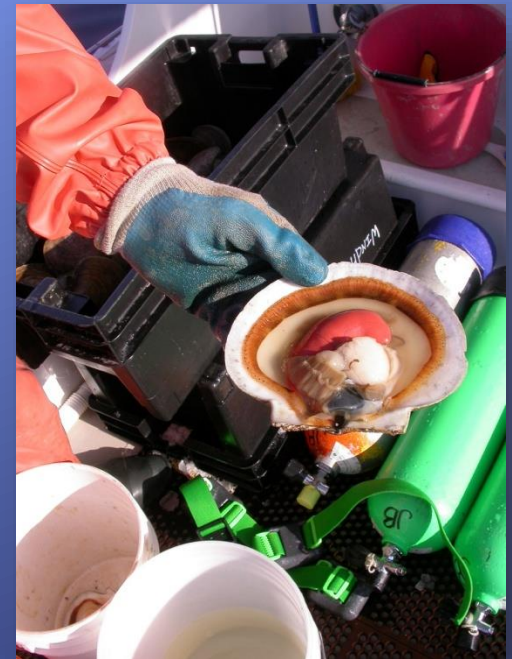
Growing Area Classification Program

- Bivalve shellfish are filter feeders and pose a unique risk to consumers
- Potentially vectors of illness due to raw or lightly cooked consumption
- Can transmit viruses, vibrio and biotoxins



Managing the Risk

- Bivalve shellfish are always a risk
- Public health programs are designed to manage that risk
- US follows the NSSP Model Ordinance (MO) as developed by the ISSC
- DMR is the sole state authority



NSSP MO Fundamentals

- Growing Area Classification
 - Establishes water quality standards
 - Establishes biotoxin limits
 - Establishes safe handling and trace-back capability





Maine Department of Marine Resources



Pollution Area No. 20

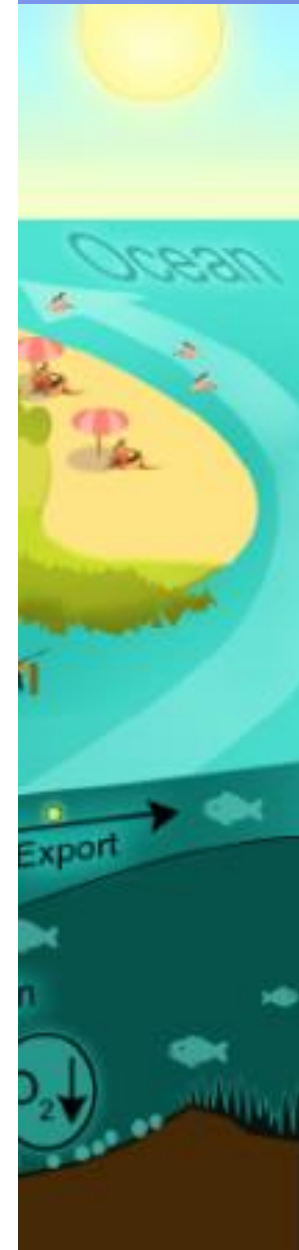
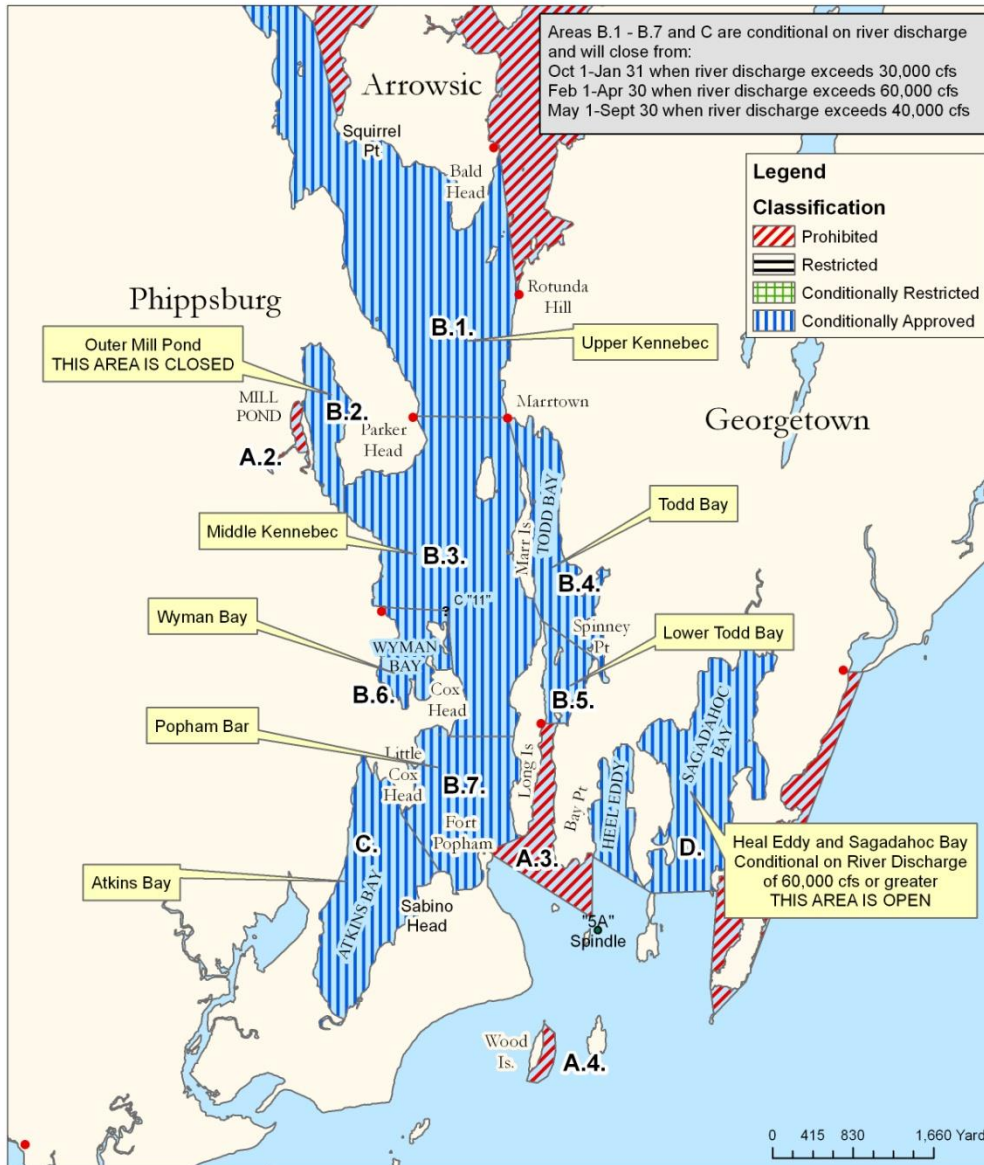
Kennebec River and Tributaries

Areas B.1 - B.7 and C are conditional on river discharge and will close from:
 Oct 1-Jan 31 when river discharge exceeds 30,000 cfs
 Feb 1-Apr 30 when river discharge exceeds 60,000 cfs
 May 1-Sept 30 when river discharge exceeds 40,000 cfs

Legend

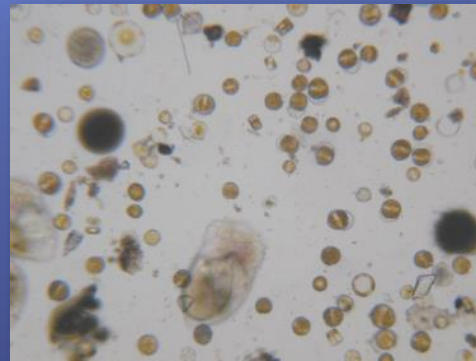
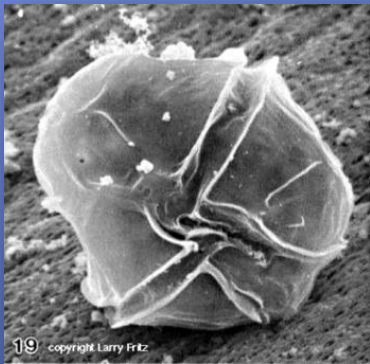
Classification

- Prohibited
- Restricted
- Conditionally Restricted
- Conditionally Approved



Biotoxin Monitoring

- Volunteer phytoplankton monitoring network
- Collect shellfish and test for PSP, ASP, and DSP
- Close contaminated areas, reopen after bloom ends and shellfish are no longer toxic
- Season is generally from March to October
- ASP has extended the season through the winter



Shellfish Dealer Certification

- Facility inspections
- Rigorous certification process
- 500 inspections annually
- Illness investigations by tracing the source through the harvester and dealer tagging system.

Cotuit Oyster Company, Inc. MA-0099-55
20 LITTLE RIVER ROAD, COTUIT, MA 02535
508-852-2747

ORIGINAL SHIPPER'S CERT. No. IF OTHER THAN ABOVE: _____ SHIPPING DATE: 08/22/2012

HARVEST DATE: 08/21/2012 FARM RAISED

HARVEST LOCATION: COTUIT BAY SC 21

TYPE OF SHELLFISH: COTUIT OYSTERS

QUANTITY OF SHELLFISH: 100

THIS TAG IS REQUIRED TO BE ATTACHED UNTIL CONTAINER IS EMPTY OR IS RETAGGED AND THEREAFTER KEPT ON FILE FOR 90 DAYS.

TO: NAME OF CUSTOMER
STREET ADDRESS
CITY, STATE, ZIP CODE

SHIPPER'S CERT. NO. _____ DATES RESHIPPED: _____



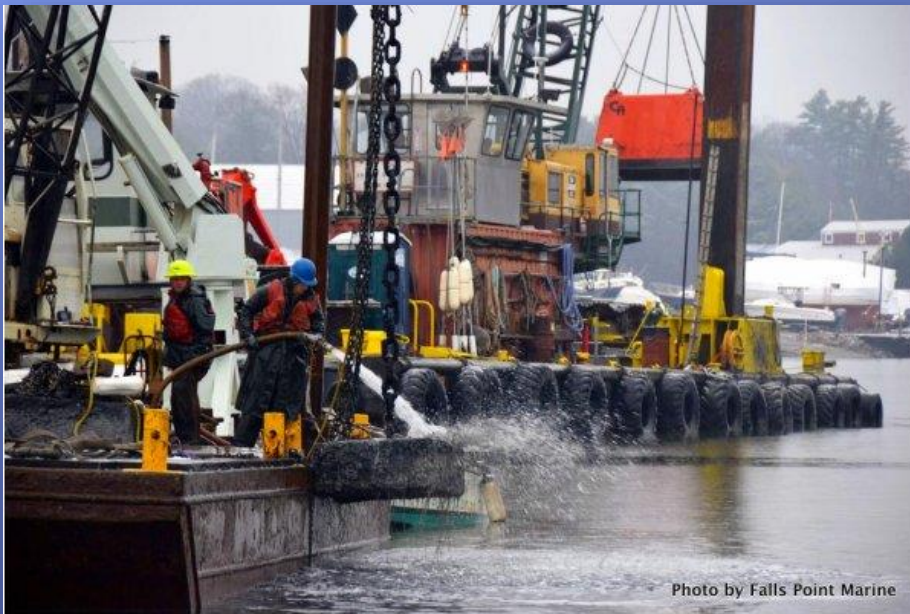
Shellfish Management

- Development and approval of municipal shellfish conservation programs
- Resource evaluations
- Applied research projects
- Other resources (worms, periwinkles, whelks, seaweed)



Environmental Permit Review

- Coordinate DMR comments
- Hold public hearings
- Follow up with permit conditions





Emerging Issues

- COVID-19
- Climate Change
- Offshore Wind
- Whale Regulations
 - Lobster Bait
 - Biotoxins
- Stock Resilience
 - Diversification
 - Entry
- Working Waterfront