

Appendix C7: Northeast Protected Resources Regulatory History



NE Protected Resources (PR) Regulatory History

Kathryn Bisack

NOAA FISHERIES SERVICE



Outline

- Historical Context
- Regulatory Support & Staffing Snapshot
- Large Whales, Harbor Porpoise, and Sea Turtles
 - Questions:
 - What policy instruments are we using?
 - What needs more investigation: future direction?
- Final Comments



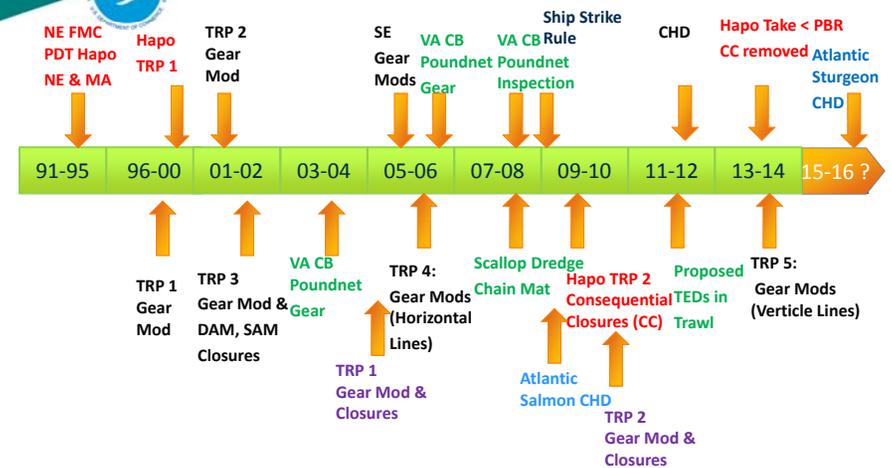
NE Historical Context

- 1991 - 2000
 - PSB forms (1991)
 - First Bycatch Estimates in 1992 (too high)
 - Recommend sampling at 10%
 - PDT form under FMC to reduce bycatch
 - 1994 Marine Mammal SARs
 - TRTs form (Lrg Whales, Hapo, Bottlenose)
 - PR economist (2000)
- 2000-Present
 - Turtle Team forms
 - Gear Researcher joins PSB
 - PSB responsibilities only to marine mammals and turtles
 - GARFO contracts out Large Whale economic regulatory work (Industrial Economics, Nathan Associates) as well as CHD for fish



Regulatory Support

Fishery Related Threats to Large Whales, Harbor Porpoise, Bottlenose, Loggerheads, Fish





NE PR Dedicated Staffing GARFO (42) > PSB (32) > SSB (1)

PSB

(18 FTE, 14 Contract)

- Commercial Fishery Bycatch Analysts (3 FTE, 2 Contract)
- Large Whales & Small Cetaceans (8 FTE, 5 Contract)
- Turtles (1 FTE, 1 Contract)
- Pinnipeds (1 FTE, 1 Contract)
- Gear Specialists (1 FTE, 1 Contract)
- Acoustics (1 FTE, 4 Contract)

SSB

(16 FTE, 4 Contract)

- Commercial (6 FTE, 3 Contract)
- Recreational (1 FTE)
- Eco-system (1 FTE)
- PR (1 FTE)
- BOEM (1 Contract)
- Anthropologists (4 FTE)

GARFO PR Division

(42 Staff)

- Marine Mammal & Sea Turtle Conservation (15 Staff)
- Section 7 (9 Staff)
- Endangered Species Coordinator (12 Staff)

5



Threats

- Fishery Related
 - Commercial
 - Recreational
- Non-Fishery
 - Offshore wind energy
 - Noise
 - Climate Change
 - Etc.

6



BCA for Fishery Related Threats

- Benefit
 - Reduction in PR bycatch
- Cost
 - Gear experiments to estimate how modifications impact direct catch (revenue losses)
 - Behavioral fishing effort shifts

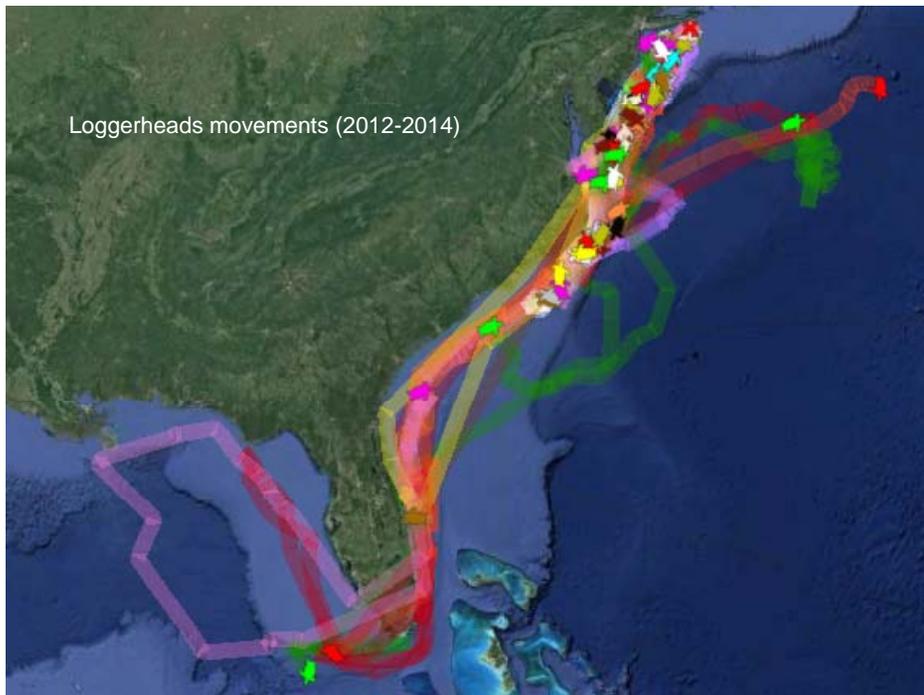
7



Sea Turtles Threats: Commercial, Recreational & Non-Fishery (See ITS)

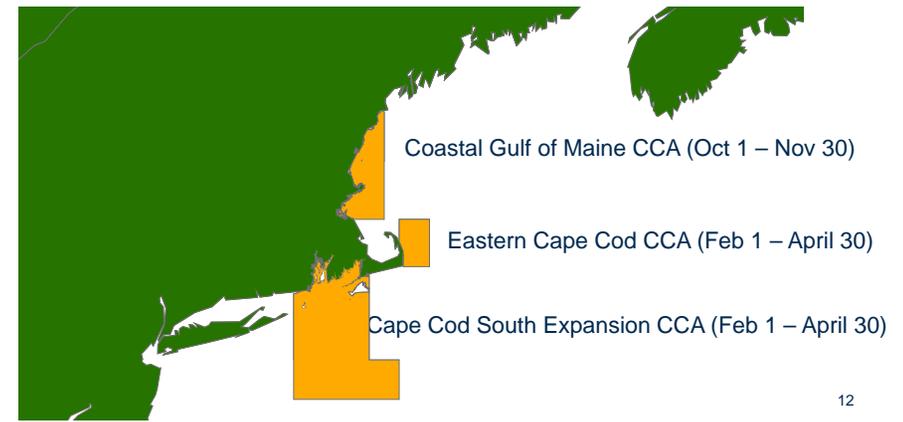
- Regulatory Support: Loggerheads (5 Actions NMFS)
 - VA Poundnet (3), Scallop Dredge (1), Bottom Trawl (1), Gillnet
 - Economic analysis for Trawl Rule to implement TEDS dropped by GARFO
 - 41 to 1 Cost ratio of saving a sea turtle in the flounder fishery in the Mid-Atlantic compared to Southern New England
- Policy Instruments
 - Gear Modifications, Closures, Inspection Program
 - Gear modification based on experimental work

8



		Loggerhead	Leatherback	No. FMPs
NER	Trawl	458	16	10
	Gillnet	199	12	6
	Dredge	161	1	1
	Poundnet	1		
SER	HMS Long Line	636	588	1
	Atlantic Shark	226	25	1
	Snapper Grouper	67	8	1
	Reef Fish	157	4	1
	Dolphin Wahoo	16	16	1
			1921	670

- Regulatory Support (2 Actions NMFS)
- Policy Instruments
 - Seasonal and Year-Round Fishery Closures
 - Gear modifications
 - Pingers in NE, experimental work in mid-90's
 - Physical alterations in Mid-Atlantic gear based on PSB bycatch analysis using NEFOP data
 - Pinger Compliance Deterrent: Consequential Closures





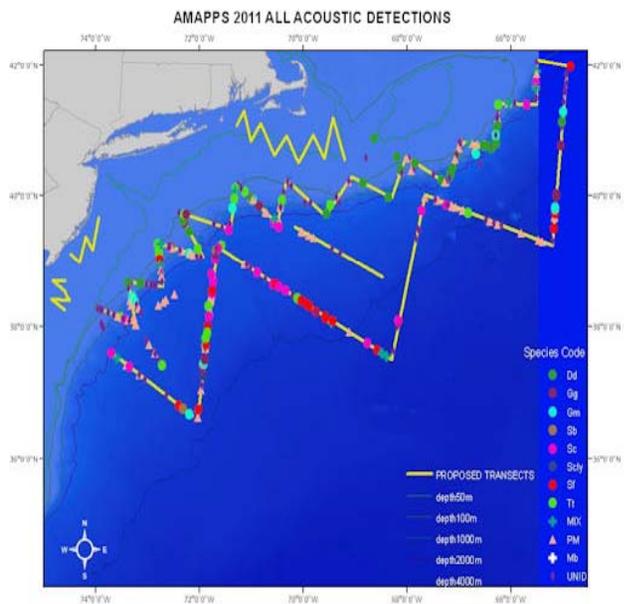
13



Large Whales (Right Whales) Threats: Fishery Entanglements, Ship Strikes, Other

- Opportunistic mortality data
- Regulatory Support (8 Actions)
 - Gillnet, Pots, Lobster Pots (5 NMFS, 2 Contract)
 - Ship Traffic Regulations (1 Contract)
- Policy Instruments
 - FMP: Gear Modifications, Seasonal & Dynamic Closures, Subsidies (to replace sinking line)
 - Shipping Rerouting (Voluntary), Speed Reductions

14



15



Other Regulatory Work Completed

- Bottlenose Dolphin (contract, SE)
- Atlantic Salmon CHD (contract)
- Atlantic Sturgeon CHD (forthcoming, contract)

16



GAPs we can address

- Turtles
 - CEA of Alternative Conservation Strategies for North Atlantic Loggerhead and Leatherbacks.
Expand upon (Ejertsen, Squires and Dutton. 2014 Conserv. Biol) SW analysis
- Harbor Porpoise
 - Is it economically feasible to reach ZMRG?
 - PBR sector allocation scheme requested (ITQs)
 - Address how a move to catch shares has impacted fleet bycatch.
 - Recommendations forthcoming via compliance research completion
- Large Whales
 - CEA of Alternative Migratory Pathways & Conservation Strategies.
 - Resuscitate, revise & incorporate the NARW WTP valuation work

17



Other Programs going on but uninformed

- **Industry Funded Scallop Observer Program (IFS)**
- NE Dolphin-safe tuna certifications via observer program

18



Final Comments

Move PR Economics to the front line of management. Benefits equal across alternative designs. Incorporate valuation (consumer benefits) into econ analyses

- Did not address what is working. We rely on biological assessments for answer, however, this does not explain whether the policy instrument was successful
- Move toward an ecosystems management approach. Integration has declined since onset of TRTs.
- Consider incentives versus deterrents to improve compliance. Understanding compliance behavior is an important component to designing successful policy instrument.

19



Final Final Comments

- **Work Smarter**
 - Coordinate and piggy back efforts with PSB/GARFO and other centers.
 - If contract out include NMFS economist
 - Bigger bang for the same buck!
 - Stop outsourcing PR economic analysis. Hire contractors to work in-house with NMFS economists.

20

NOAA
FISHERIES
SERVICE



Thank-you

<http://www.nefsc.noaa.gov/psb/surveys/index.html>

Questions?