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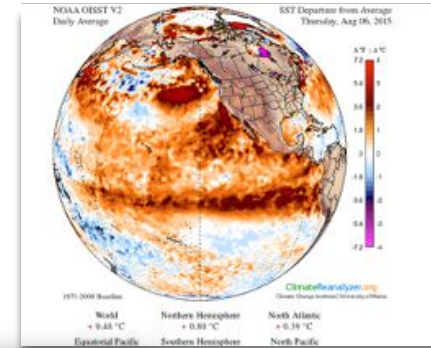
Science Enterprise Update

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Council Coordination Committee
Washington, DC
October 18-20, 2022

Opportunities for NOAA Fisheries Science

- **Adapting the survey enterprise** - Surveys and other ocean observations are essential currency for scientific advice. Data Acquisition Planning.
- **Advancing Climate-Ready Fisheries** - Ocean ecosystems are changing at unprecedented rates affecting all of NMFS' mission



Adapting the Survey Enterprise



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NOAA Fisheries Surveys

- NOAA Fisheries' surveys are essential for:
 - the sustainable management of our nation's fisheries,
 - recovery of protected resources, conservation of habitats and ecosystems,
 - understanding the impacts of climate change
- The data collected by surveys form the scientific foundation for our management and conservation work



Fishery-Independent Surveys FY2022

Status	Q1 Oct-Dec, 2021	Q2 Jan-Mar, 2022	Q3 April-Jun, 2022	Q4 As of Sept. 20, 2022
Completed	6 / 9 / 1	2 / 1 / 1	12 / 5 / 2	12 / 16 / 6
Cancelled	1	2	4 / 0 / 1	1 / 2 / 1
Underway				6 / 8 / 1
(NOAA/Charter/Small boat)				



Survey Vision for the Future

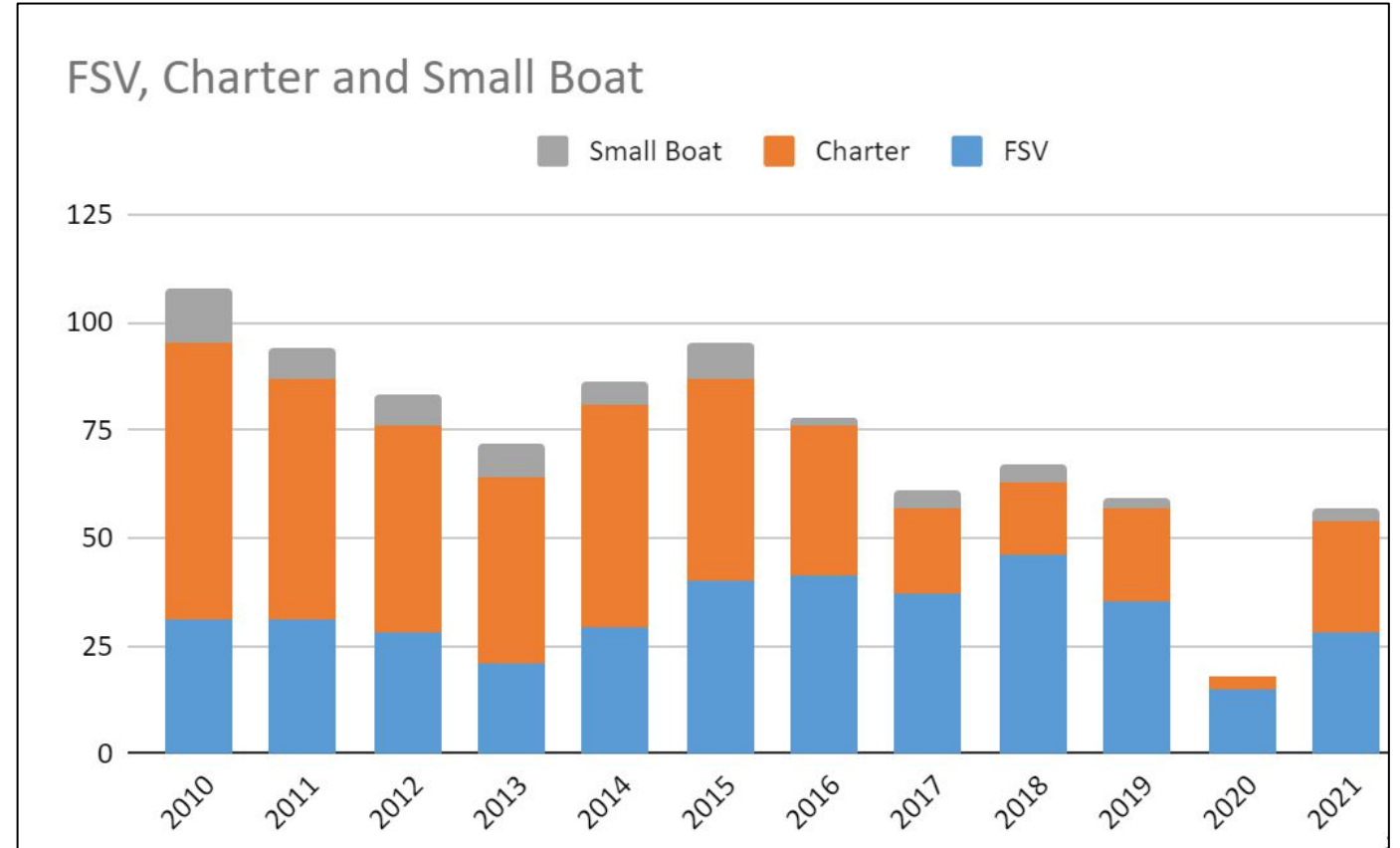
- **Sustain** core strength while we build the **additional capacity** needed to face the ever-growing challenges of climate change
- **Modernize** - Evaluate and implement **new technology platforms** for collecting data and enhancing workforce efficiency
- **Strengthen** survey **planning, prioritization, and management** of survey resources to optimize return on investment



Sustaining Current Survey Enterprise

Goals to sustain our survey enterprise:

- Restore capacity
- Expand regional coverage
- Increase data collection
- Continue advanced technology initiatives
- Increase staff proficiency



Data Acquisition Planning

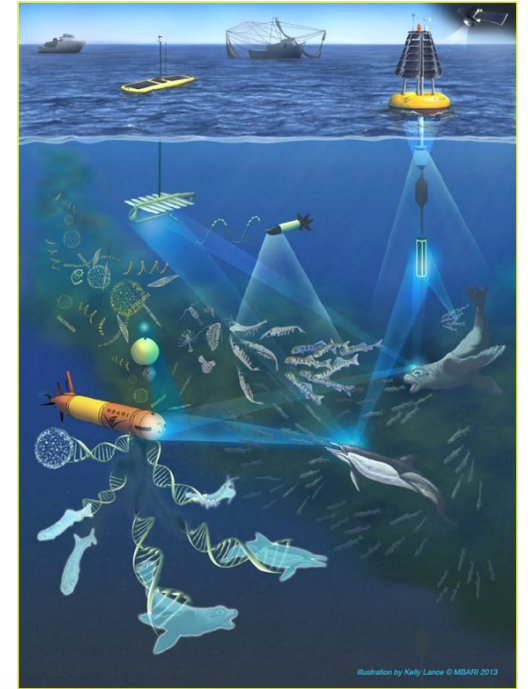


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Next Generation Data Acquisition Plan

Next Generation Data Acquisition Process:

- Identified current and future data needs and priorities
- Reviewed Literature
- Questionnaire, listening sessions, workshops and expert focus groups that captured information from internal and external stakeholders
- Draft document currently under internal review



Next Generation Data Acquisition Plan

Themes that emerged:

- Uncrewed systems (UxS)
- Automated sampling and processing
- Remote sensing
- Acoustics
- Molecular tools
- Electronic monitoring and reporting
- Citizen science

Draft document currently under internal review



Advancing Climate Ready Fisheries



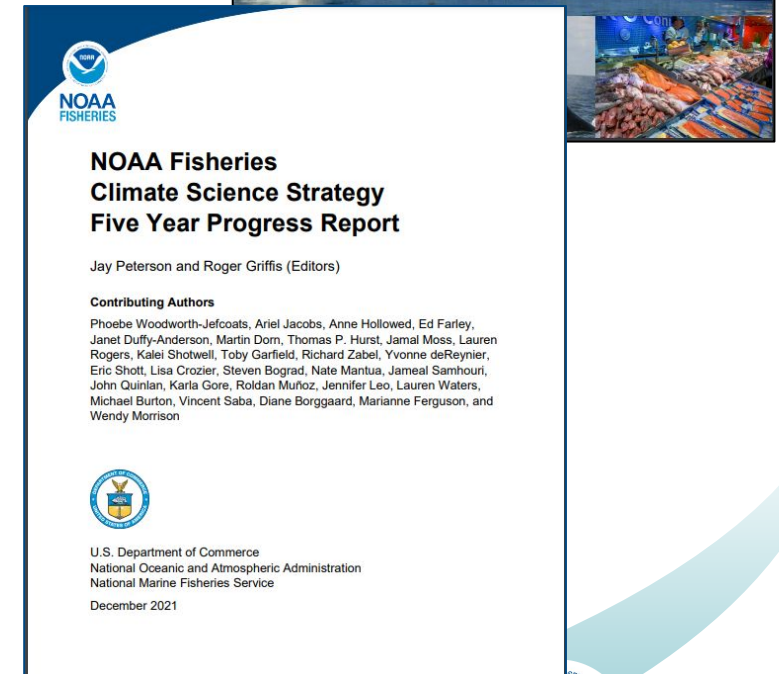
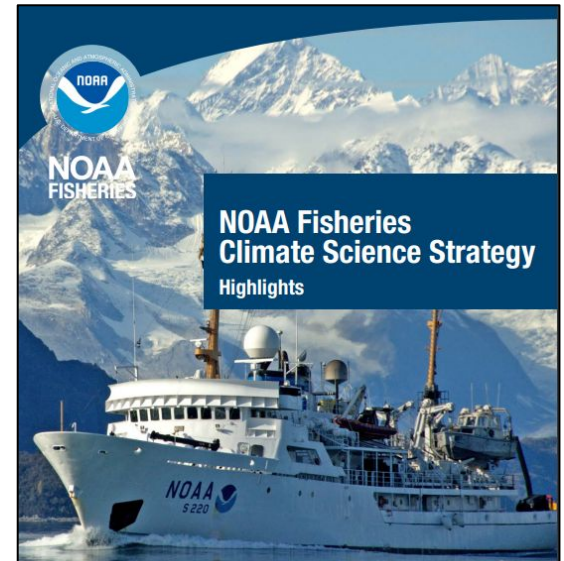
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Climate Regional Action Plans (RAPs)

Actions to implement the NOAA Fisheries Climate Science Strategy (2015)

Timeline:

- 2016: Developed initial RAPs
- 2017: Began implementation
- 2020: Assessed progress
 - [5-yr progress report](#)
- 2021: Launched RAP updates
- 2022: Public comment period
- 2022: Complete RAPs for 2022-24



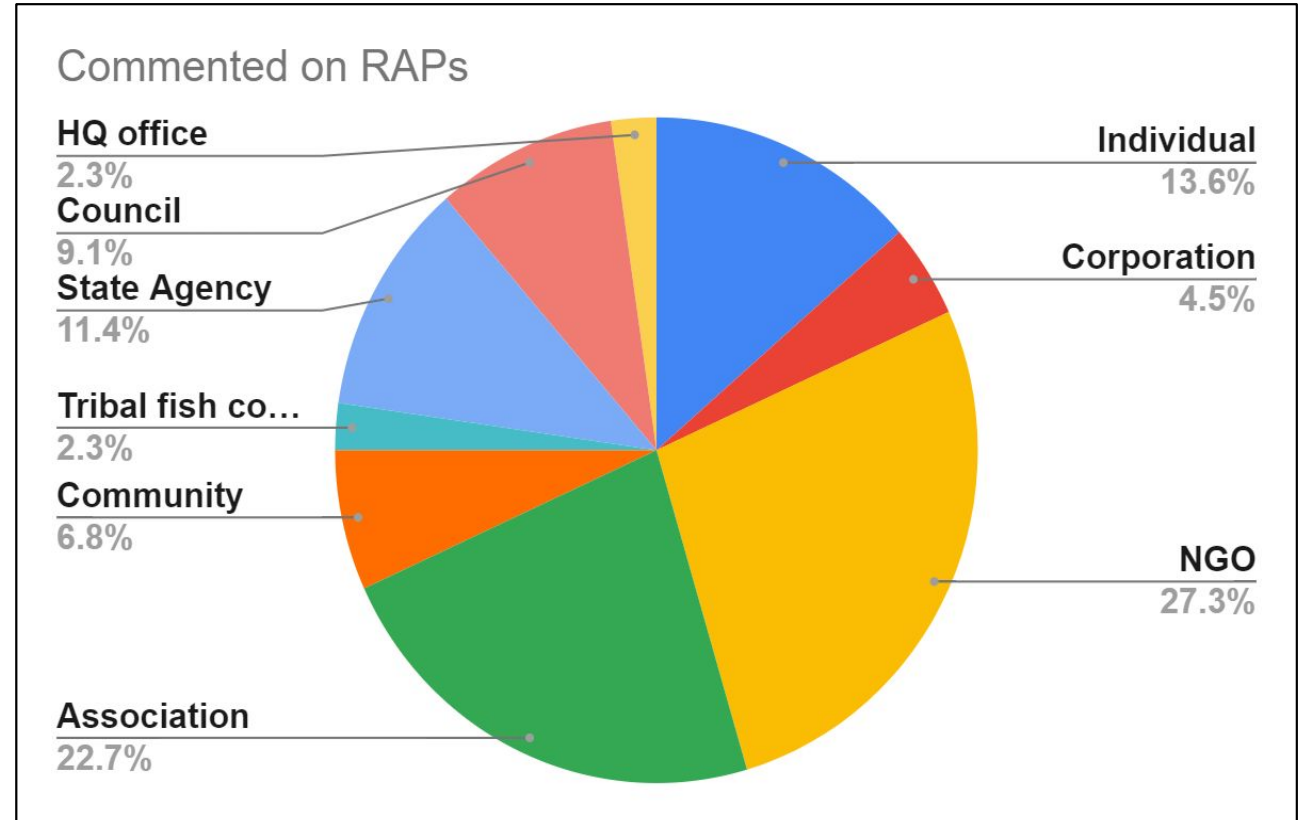
Draft Climate Regional Action Plans

- Proposed actions 2022-24.
- Address key regional needs.
- Build on progress since 2016.
- Informed by input from Science Centers, Regional Offices, Councils and 2 calls for public comment:
 - [Public call \(EO14008 216\(c\)\)](#) on how to advance resilience (2021)
 - [Public call](#) on draft RAPs (2022)



Public Input on draft RAPs

- 90+ day comment period (April-July)
- FRN & [NMFS web-page](#)
- Requested input on
 - Clarity of draft RAPs
 - Ways to strengthen
- Input from diverse audiences (NGOs, Associations, State agencies, individuals, Councils, communities)



Public Input - Respondents

- 44 submissions
 - Substantive input
 - Broad and specific
 - Address multiple RAPs
- Majority focused on Alaska, Northeast, and all RAPs in general
- 12 - 23 public input documents for each region to consider.

Region	# of responses
General (All)	10
NE	12
SE	3
West	3
Pacific Is	2
Gulf of AK	10
EBS	13
Arctic	10



Public Input - Feedback

- Support for NMFS efforts to identify regional needs and advance climate-ready fisheries
- Support for RAPs and additional actions
 - Prioritize surveys and ecosystem monitoring
 - Increase funding for key tools including CEFI
 - Better link science to regional management needs
 - Expand RAPs to include more management applications
- Engage and collaborate with stakeholders
- Adopt more consistent RAP format and track progress
- Comments available at this link [RAP Public Input 2022](#)



Next Steps

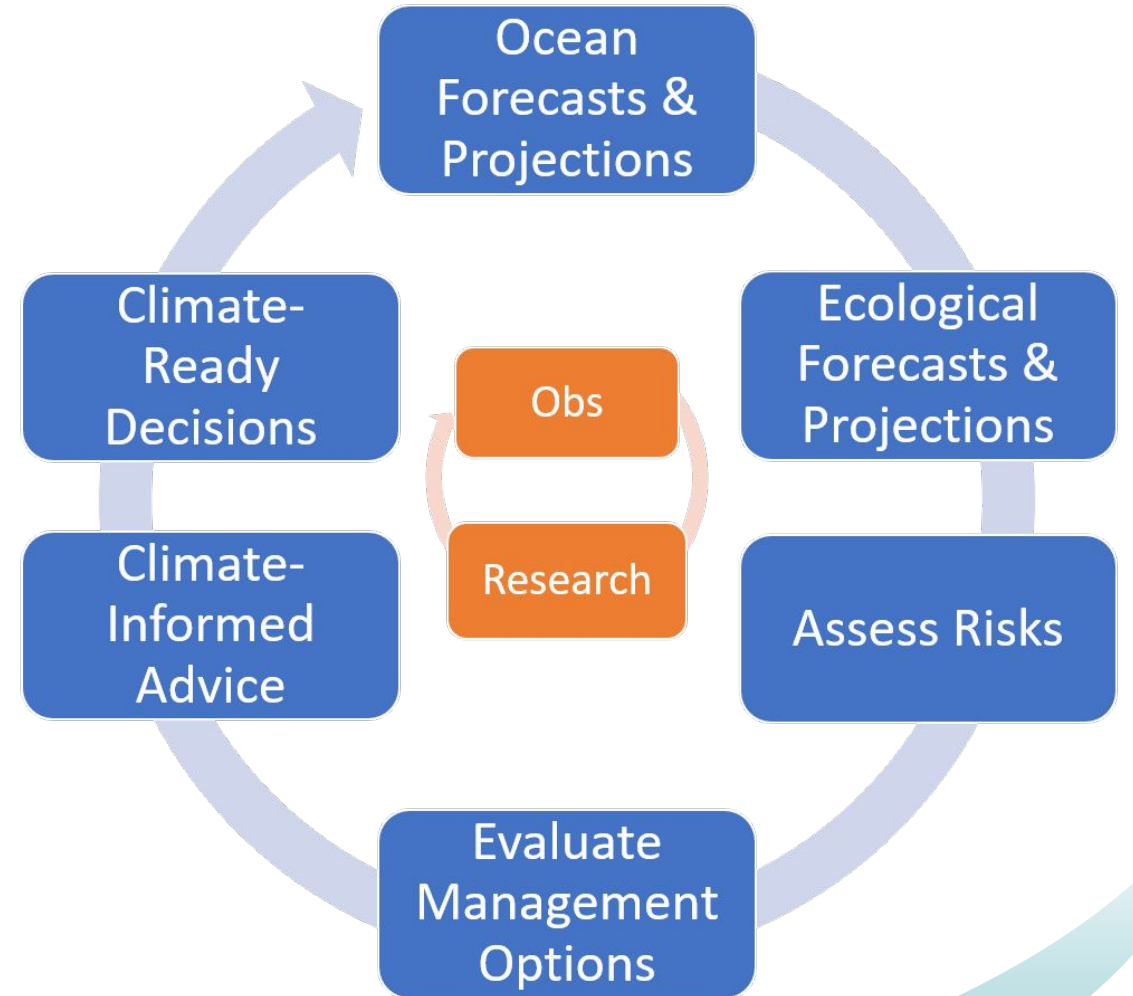
- September-November:
 - Incorporate public input
 - Finalize performance metrics
 - Review and finalize RAPs
- December: Publish RAPs
- January: Implement RAPs 2023-24



NOAA Climate, Ecosystems and Fisheries Initiative (CEFI)

A cross-NOAA effort to provide climate-informed advice to reduce risks and increase resilience of marine resources and the people and businesses that depend on them.

- End-to-end system
- Robust forecasts and projections of future ecosystem conditions
- Operational delivery of climate informed advice
- Increase capacity for climate-informed decision making

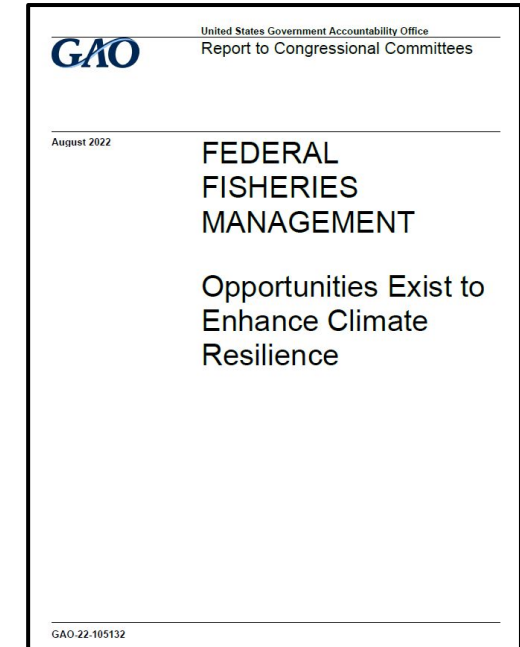


Current Status

- CEFI in FY23 NOAA budget:
 - Request: \$20 M (\$10M each NMFS & OAR)
 - House mark: \$5 M (NMFS)
 - Senate mark: \$1 M (NMFS)
- CEFI pilot projects underway in four regions (Northeast, West Coast, Gulf of Alaska, and Bering Sea)
- Updating build-out plans for FY23-26
- Inflation Reduction Act funding - TBD
- More information on [CEFI at this link](#)

GAO Report: Enhancing Climate Resilience of Federal Fisheries

- Report examines (1) the use of climate-related information by fisheries managers and (2) challenges and opportunities to enhancing the climate resilience of federal fisheries.
- Findings based on assessment of actions since 2016 and input from NMFS, Councils and other sources.
- Propose working with Councils to address the two recommendations:
 - Collect and publicly share information on actions taken by the Councils to enhance the climate resilience of federal fisheries
 - Work with the Councils to identify and prioritize opportunities to enhance the climate resilience of federal fisheries



Questions?



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