

# Science Enterprise Updates



**NOAA  
FISHERIES**

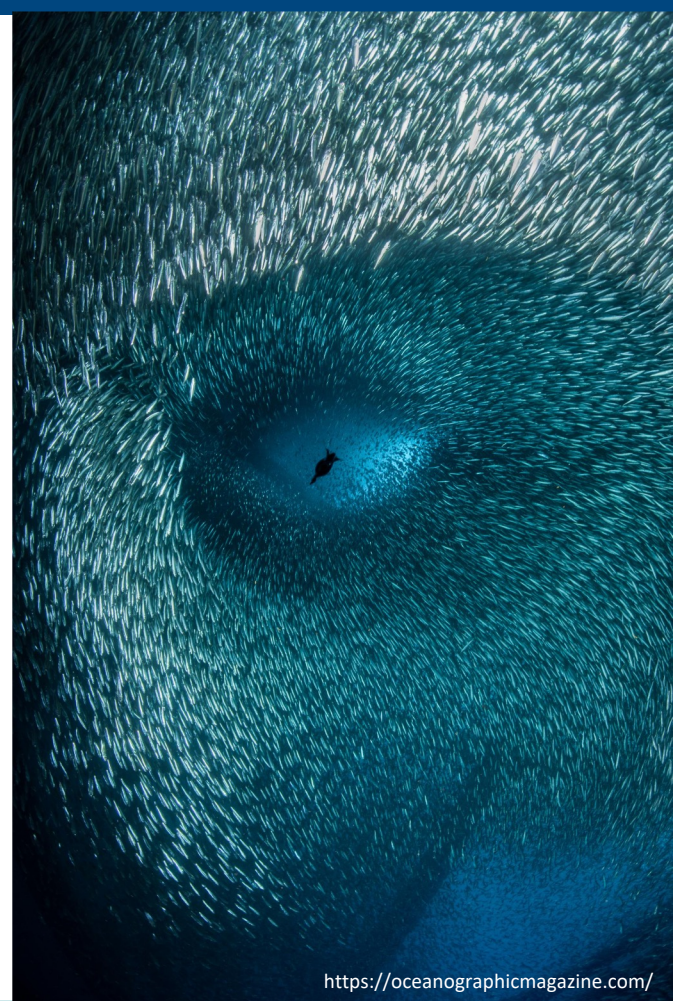
**Cisco Werner**  
Chief Science Advisor &  
Director of Scientific Programs

**Evan Howell**  
Director, NMFS Office of Science & Technology

**CCC Meeting, Oct 2023**  
**Washington, DC**

# Topics

- Surveys and Fleet Updates
- IRA updates
  - CEFI
  - Essential Data Acquisition
    - Strategic Initiatives
    - Survey modernization and loss mitigation
- Midlife Repair Periods (MRPs)
- MRIP update



<https://oceanographicmagazine.com/>

# Fleet/Survey Updates

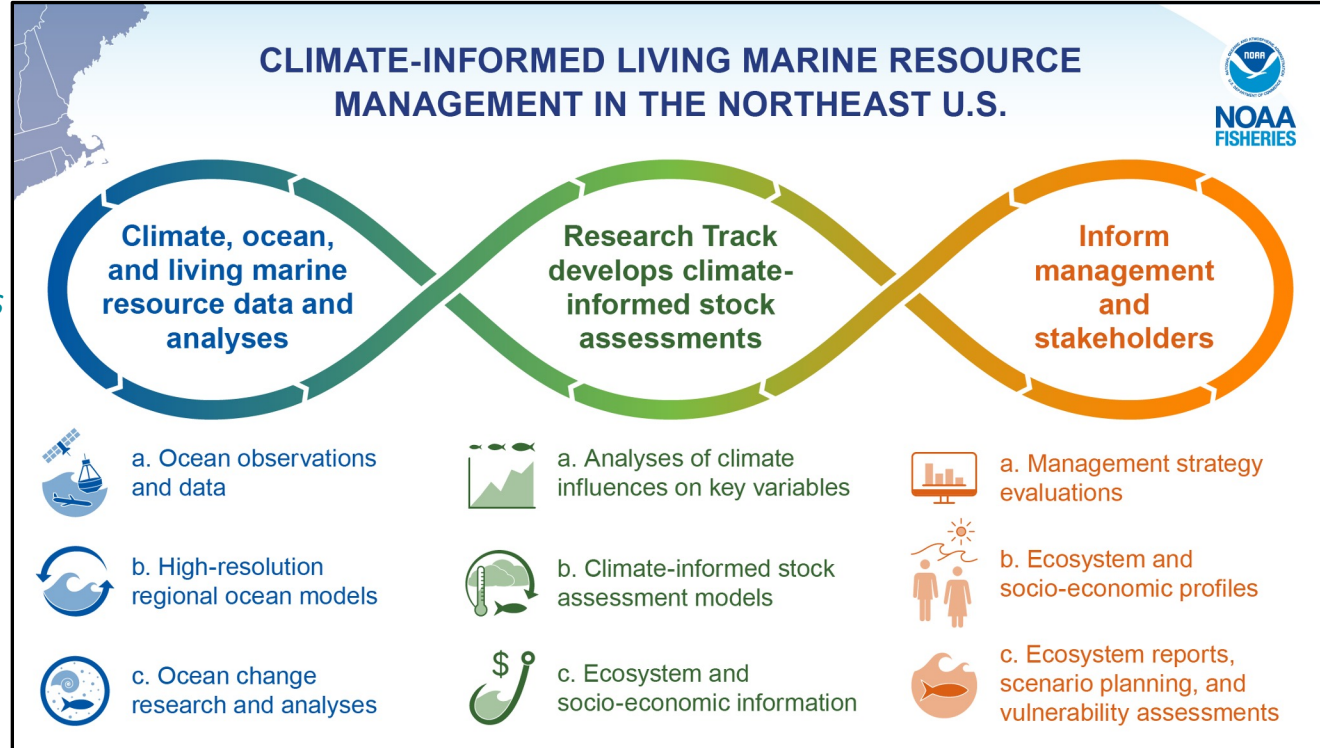
- In FY23, we completed ~70% of our surveys on our FSVs. Challenges included:
  - Workforce
  - Repairs/maintenance
- For FY24, the NOAA Fleet Plan aims for ~1500 DAS for NMFS surveys (pending final appropriations)
  - The *Rainier* experienced a fire (all crew safe) and likely unavailable for most of FY24 (<https://www.oma.noaa.gov/mo/news-media/article/noaa-ship-rainier-incident-update>)

## Forward looking:

- Contracts for two Class B (charting) vessels have been awarded - completion ~2027 (<https://www.noaa.gov/news-release/contract-for-2-noaa-research-ships-awarded-to-thoma-sea-marine-constructors-llc>)
- Analysis of Alternatives (AoA) for Class C (Fisheries and Coastal Science) ships underway

# Climate, Ecosystems & Fisheries Initiative

- **BUILD** the end-to-end operational ocean modeling & decision support system for CRF
- **PROVIDE** decision-makers with forecasts, risk assessments & management options essential to EBFM
- **ENABLE** climate-informed LMR management.



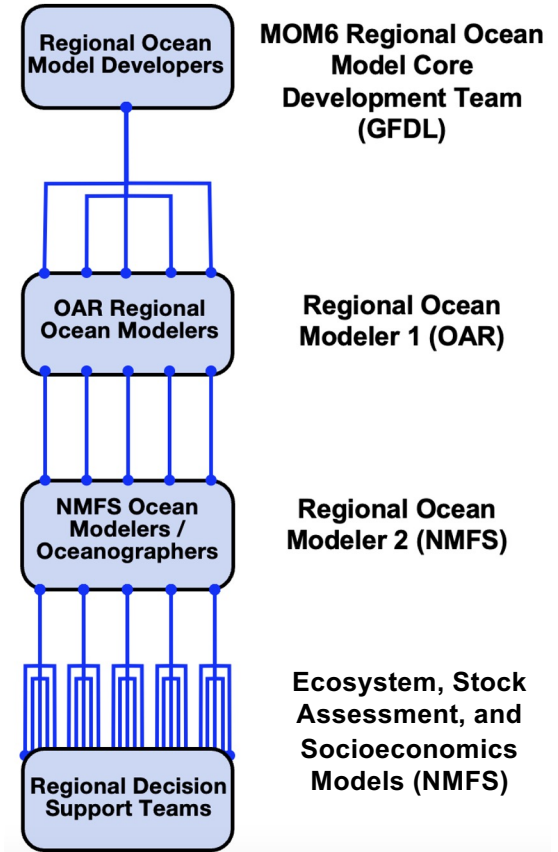
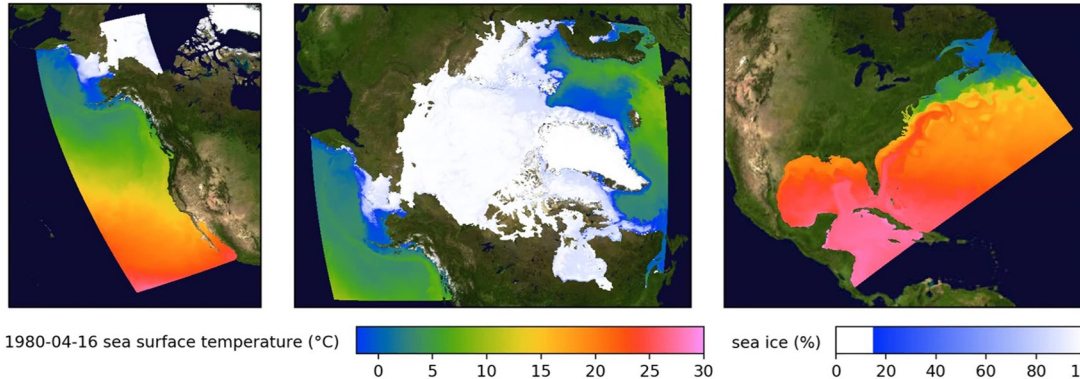
# CEFI – goals & next steps

## FY24/25:

- Robust ocean projections in six regions
- Ocean modeling output accessible from Information Hub
- Decision Support Teams operational in six regions

## FY25/26:

- Climate-related information and advice available in six regions



# Essential Data Acquisition

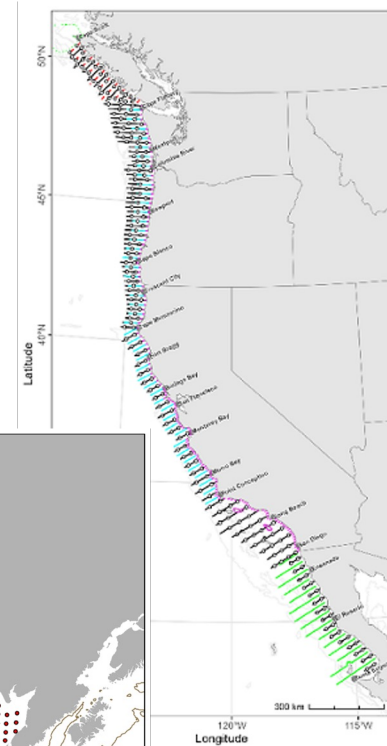
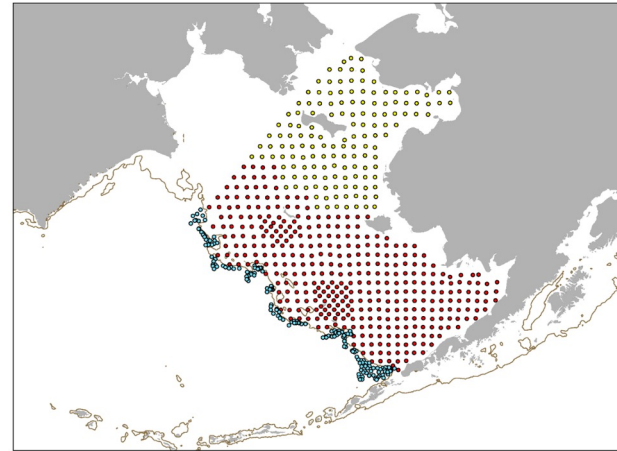
**Modernize and transform NMFS' advanced technology and social science capabilities through targeted Strategic Initiatives:**

- Uncrewed systems (UxS)
- 'Omics
- Active acoustics systems
- Passive acoustic systems
- Optical systems
- Remote sensing, and
- Social science

# Essential Data Acquisition

Mitigate the recent loss of at-sea survey capability and increase the efficiency of traditional platform data acquisition

- Integrated West Coast Pelagics Survey
- Pacific protected species charters (AK/PI/SW)
- Research vessel purchase (SE/NE)
- Alaska fisheries charters
- National Survey Program
- Other priorities in conjunction w/  
annual survey budget



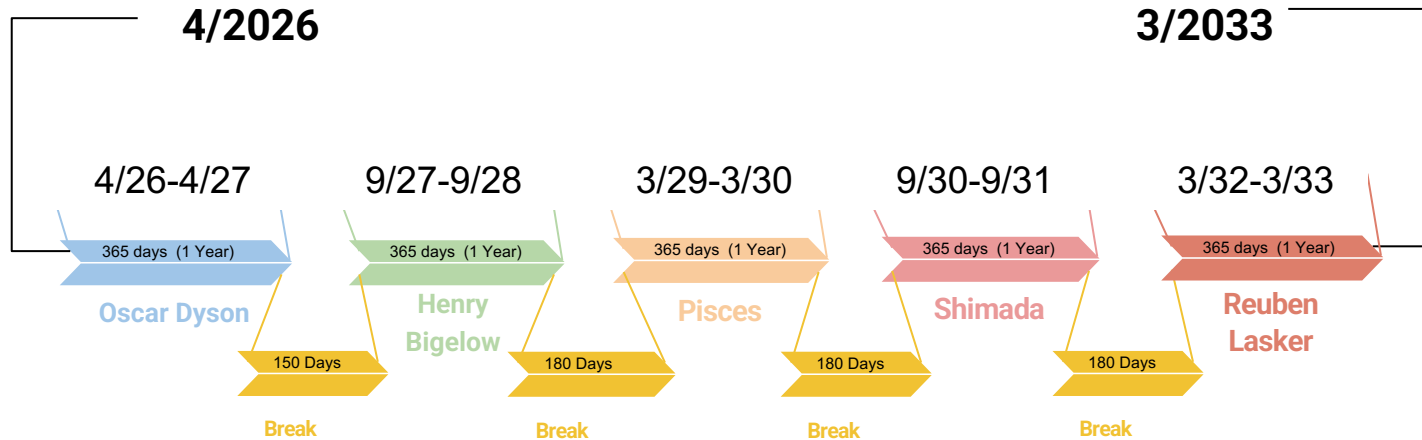
# Midlife Repair Periods (MRPs)

**Context:** The FSVs were designed for a 20 year service life. Launched between 2003 and 2012 they are now approaching the end of design service life, and to extend their service life, NOAA is planning on conducting Midlife Repair Periods (MRPs):

- are a thorough, **bow-to-stern, evaluation of the material condition of each vessel and repair** or replacement of any damaged, deteriorated, or other less than optimal parts and systems,
- facilitate **upgrades intended to standardize the fleet**, reduce carbon emissions, and increase overall reliability of the vessels, and
- total approximately **\$85 million for each vessel and take 12-14 months** to complete (2024-2033).  
(To date, only the *Dyson's* MRP is funded.)

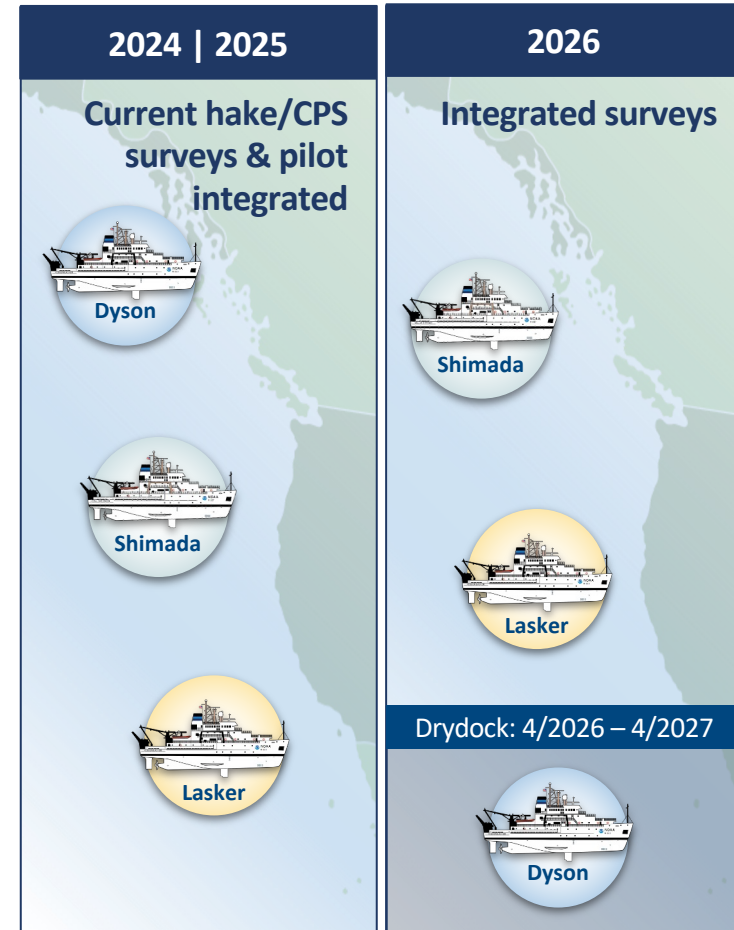


# FSV MRP Schedule (as of 10/23)



# MRP Strategy and Roadmap

- **Ships**
  - Ensure essential surveys NOAA surveys continue
  - How should UNOLS, charter, and industry vessels be factored into mitigation strategies?
  - How will the *Sette*, *Oregon-II* and *Gunter's* expected EOSLs affect the MRPs?
  - Contingencies for other possible delays
- **Costs/Budgets**
- **Personnel**
- **Implementation of New Technologies**
- **Communications**



# Dyson, Shimada & Lasker: 2024-2033 scenarios

2024 | 2025

Current hake/CPS  
surveys & pilot  
integrated



2026

Integrated surveys



Drydock: 4/2026 – 4/2027



2027 | 2028 | 2029

Integrated surveys  
& more



2030 | 2031

Integrated surveys



Drydock: 9/2030 – 9/2031



2032 | 2033

Integrated surveys



Drydock: 3/2032 – 3/2033



# Survey Vision for the Future

- **Sustain** core strength while we build the **additional capacity** needed to face the growing challenges of climate change.

**Action:** \$14M/yr in new survey funds and IRA EDA/mitigation funds.

- **Modernize** - Evaluate and implement **new technology platforms** for collecting data and enhancing workforce proficiency.

**Action:** IRA EDA/AT Strategic Initiatives.

- **Strengthen** survey **planning, prioritization, and management** of survey resources to optimize return on investment.

**Action:** Creation of new national survey program (fall 2023) and NAPA products (annual, November 2023 and beyond)



# MRIP FY24 Improvements

- **FES Improvement Study (Q order, monthly waves) in 2024**
- Continued coordination with Councils to identify discussion/actions we can undertake while study occurs
- Continue to work on new vision for Federal-State partnership for recreational fisheries data collection and usage (NMFS HQ, NMFS Regions, Regional Partners)



# Thank you

