



RESEARCH

NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION

OAR Portfolios

CPO Program Review

May 24, 2022



History & Purpose of OAR's Portfolios



Office of Oceanic & Atmospheric Research Delegations & Directives

CIRCULAR NUMBER: 222.1

EFFECTIVE: January 1, 2016

Subject: Appointment of the Office of Oceanic and Atmospheric Research Portfolio Stewards

Section 1. Introduction.

The Office of Oceanic and Atmospheric Research (OAR) seeks to improve its performance and reputation for mission-oriented support by bringing focus to its internal communication, coordination and collaboration across each of the mission areas of the National Oceanic and Atmospheric Administration (NOAA) Strategic Plan. To date, efforts have produced rewards in our budget and expanded partnerships within and beyond NOAA, including with the academic community, our constituents, and the private sector.

To enhance and expand upon this success, the OAR Assistant Administrator (AA) is appointing three Portfolio Stewards, beginning January 1, 2016, to serve as knowledgeable, experienced, and engaged coordinators to guide collaborative activities in the Climate, Weather, and Oceans/Coasts/Great Lakes portfolios in OAR. The purpose of the Portfolio Steward position is to enhance the communication, coordination, and collaboration across OAR, and to serve as a Point of Contact between OAR and other NOAA Line and Staff Organizations, and with partners in other federal agencies, academia, the private sector, and internationally at the peer level in order to achieve improved efficiency and awareness in mission performance.

Section 2. Roles and Responsibilities of Portfolio Stewards.

Specifically, the OAR Portfolio Stewards will:

- .01 Maintain a contemporary awareness of the programmatic, research, and service portfolio activities within the domain of the NOAA Strategic Plan Goal for which they are responsible, including alignment with the Department of Commerce (DOC) strategic goals/objectives, and the OAR strategic plan.
- .02 Engage with program Stewards or positions of similar responsibility within OAR and in other Line Organizations to assess, coordinate, and address, as feasible, the research and service needs of other mission areas of NOAA that can benefit from OAR science and contributions of effort.
- .03 Serve as a Point of Contact for communication, coordination and collaboration with appropriate entities outside of NOAA in advancing and executing the portfolios in service to NOAA and DOC mission goals.

The Portfolios were established by OAR Circular 222.1 in 2016.

This Circular was revised in 2020.

The purpose of the OAR Portfolios is to enhance communication, coordination, and collaboration across OAR.



Overview of OAR's 3 Portfolios



Climate Portfolio

Portfolio Steward - Wayne Higgins

Portfolio Advisor - Neil Christerson Mozer

Oceans Portfolio

Portfolio Steward - David Legler

Portfolio Advisor - Katie Robinson

Weather

Portfolio Steward - Dorothy Koch

Portfolio Advisor - Kathryn

Provides support to all three Portfolios

Portfolio Analyst - Maureen Brooks

Portfolio Analyst - Vacant

Portfolio Focus



The OAR Climate Portfolio focuses on long-term observations, research to advance understanding, and modeling to improve predictions of our Earth system.



The OAR Weather Portfolio focuses on improving understanding and forecasting capabilities for near-term (minutes to 2 years) high-impact weather events that endanger lives and property.



The OAR Ocean Portfolio focuses on improving understanding of habitats, processes, and resources in the oceanic, coastal, and Great Lakes environments.

CPO is a member of the Climate Portfolio

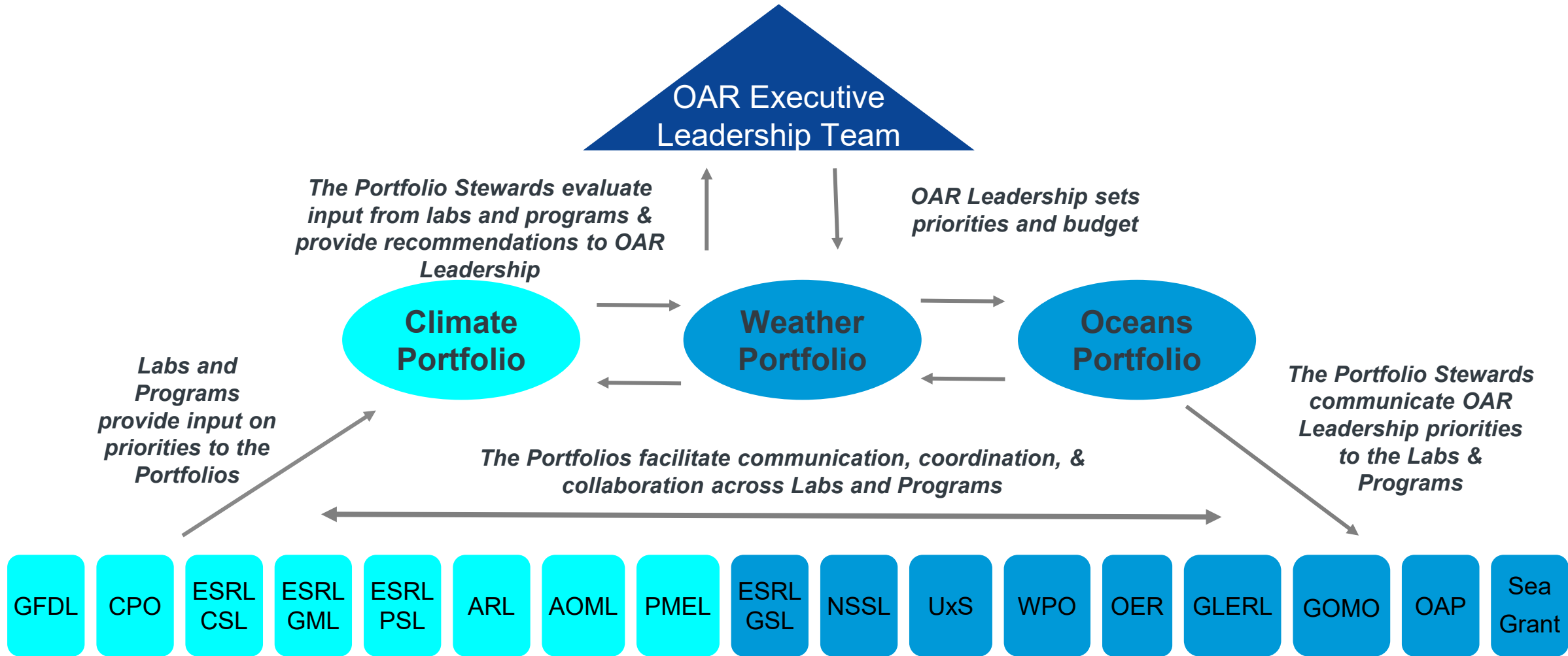
OAR Circular 222.1 establishes the CPO Director as the Climate Portfolio Steward

Portfolio & Portfolio Membership is determined by Program, Project, or Activity (PPA) funding





How the Portfolios Work

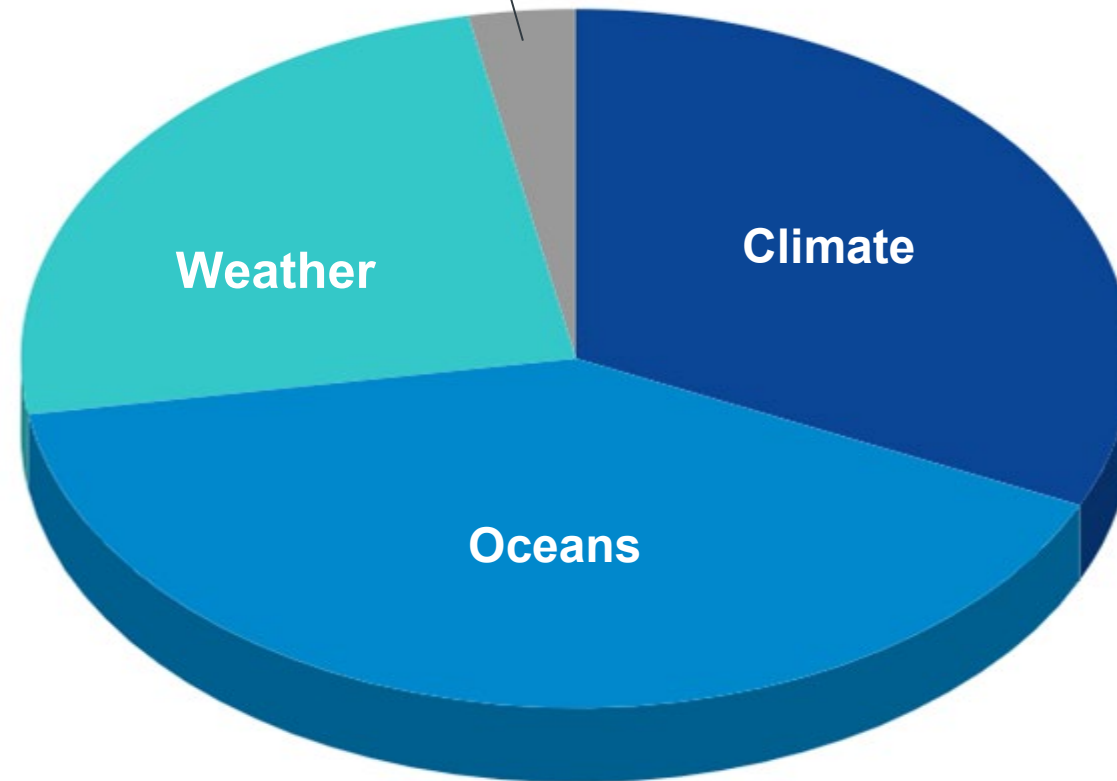


Facilitating effective budget planning and execution



OAR FY21 Budget

Innovative Research & Technology



Climate: \$182.0 M
Oceans: \$231.4 M
Weather: \$139.4 M
IR&T: \$17.8 M

Examples of CPO Alignment with the Portfolios



Reduce vulnerability to extreme events.

- *Regional Integrated Sciences and Assessments (RISA) supports regional research teams across the U.S. that conduct innovative, interdisciplinary, stakeholder-driven, and regionally relevant research that informs resource management, planning, and public policy.*

Advance atmospheric science to protect human health and the environment.

- *The Climate Variability and Predictability (CVP) Program supports research that enhances our process-level understanding of the climate system through observation, modeling, analysis, and field studies. CVP-supported research underpins many of the environmental assessments, weather forecasts, and climate projections used by the nation to make decisions about infrastructure development, aviation, farming, ecosystem management, emergency preparedness, and other critical areas.*

Maintain sustained climate observations to inform the climate enterprise.

- *The Climate Observations and Monitoring program supports continuing, focused activities at universities, private research companies, and government laboratories to leverage NOAA's large volume of observational platforms. Projects develop long time-series, and higher level data products of essential climate variables and processes needed to understand the climate system on time scales ranging from days to a century, and longer.*

Communicate and provide decision support services for water management.

- *Through stakeholder engagement and training, the CPO Water Resources Risk Team helps local stakeholders understand how their regional water cycle is changing in the current climate, and projected future climate scenarios. The Team explains uncertainty and ranges of plausibility in regional precipitation extremes.*



CPO's Alignment with the Portfolios

CPO is under the Climate Portfolio and engages in many cross-Portfolio activities with the Weather and Oceans Portfolios



- **Air Quality/Chemistry**
- **Climate Variability and Predictability**
- **Modeling Analysis Predictions and Projections**
- **Climate Observations and Monitoring**
- **Climate and Societal Interactions (RISA, Adaptation Science)**
- **NIDIS, NIHHIS, Coastal Inundation, Arctic Research**
- **Climate.gov and Climate Resilience Toolkit**



Looking to the Future

The Portfolios identified the following priorities for FY22 and beyond:

- *Coastal Inundation at Climate Timescales*
- *Precipitation Prediction Grand Challenge and Water Prediction*
- *Climate and Fisheries Initiative*
- *Ocean Atmosphere interactions*
- *Climate Risk Areas Initiative*
- *Detect ongoing and rapid change in our atmosphere and oceans (e.g., GHG observing system)*
- *Boundary Layer Research*
- *Offshore Wind*
- *Climate Intervention Research (Earth's Radiation Budget / Aerosols)*
- *Carbon dioxide removal (CDR)*
- *Socio-Economic Valuation Work*
- *Arctic*
- *Integration of social science*

The Portfolios will also play a role in facilitating the implementation of OAR and NOAA priorities.

- *Goals of the OAR Strategy 2020-2026:*
 - (1) *Explore the Marine Environment*
 - (2) *Detect Changes in the Ocean & Atmosphere*
 - (3) *Make Forecasts Better*
 - (4) *Drive Innovative Science*
- *NOAA R&D Vision Areas 2020-2026:*
 - (1) *Reducing societal impacts from severe weather and other environmental phenomena*
 - (2) *Sustainable use and stewardship of ocean and coastal resources*
 - (3) *A robust and effective research, development, and transition enterprise*
- *OAR Implementation Plan Outcomes (CPO)*
 - (1) *Improve the simulation of seasonal precipitation variability and trends in Earth System Models by implementing key processes that drive climate modes (ENSO, MJO, PDO)*



Questions?

