Congressional Research Service
Informing the legislative debate since 1914

IN FOCUS

July 5, 2022

National Oceanic and Atmospheric Administration (NOAA) FY2023 Budget Request and Appropriations

The National Oceanic and Atmospheric Administration (NOAA) is an agency of the Department of Commerce whose mission is to understand and predict changes in weather, climate, oceans, and coasts; to share that information with others; and to conserve and manage coastal and marine ecosystems and resources. NOAA's work is divided among six line offices: National Environmental Satellite, Data, and Information Service (NESDIS); National Marine Fisheries Service (NMFS); National Ocean Service (NOS); National Weather Service (NWS); Office of Oceanic and Atmospheric Research (OAR); and Office of Marine and Aviation Operations (OMAO). NOAA also has an overall Mission Support (MS) office, which provides planning, administrative, financial, information technology, and other services to NOAA's line offices.

Congress provides NOAA with annual mandatory and discretionary appropriations. Mandatory appropriations generally form a small percentage of total NOAA funding and are disbursed to a variety of funds that support programs in NOS, NMFS, and OMAO. Discretionary appropriations typically are included in the annual Commerce, Justice, Science (CJS), and Related Agencies appropriations act. Discretionary appropriations support two broad accounts—operations, research, and facilities (ORF) and procurement, acquisition, and construction (PAC)—and a few smaller accounts. This CRS product focuses on NOAA's FY2023 discretionary funding for ORF and PAC. The product also notes potential issues for Congress, including NOAA's satellite operations, climate-related products and services, and economic development activities.

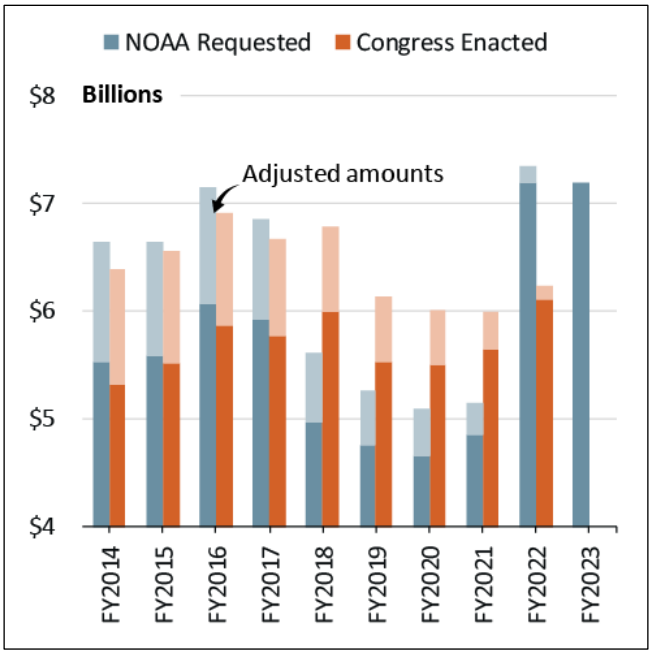
Agency Funding

NOAA requested a total of $7.20 billion in discretionary *direct obligations* for ORF and PAC for FY2023, including $6.82 billion in appropriations (**Table 1**). Direct obligations include annual appropriations, transfers, and recoveries from prior-year obligations. Congress provided $6.11 billion for ORF and PAC in FY2022, including $5.83 billion in appropriations. The enacted amounts included $84.35 million for community project funding or congressionally directed spending items (the first time Congress included such funding since FY2012). The NOAA FY2023 requested amount is $1.09 billion above the FY2022 enacted level and $1.31 billion over the FY2023 base level (the FY2022 continuing resolution amount plus expected adjustments, such as inflation). Over the last 10 years, enacted annual NOAA ORF and PAC direct obligation amounts peaked in FY2016 in adjusted dollars and in FY2022 in nominal dollars (**Figure 1**).

In recent years, Congress also has provided NOAA supplemental appropriations for ORF and PAC. Such appropriations include a total of $145 million for expenses related to hurricanes and wildfires in 2020 and 2021 to be obligated in FY2022 through FY2024 (P.L. 117-43) and a total of $2.79 billion for restoration, observation, modeling, and forecasting activities, among other purposes, for use in FY2022 through FY2026 (Infrastructure Investment and Jobs Act, IIJA; P.L. 117-58).

Figure 1. Annual Direct Obligations for ORF and PAC Accounts, FY2014-FY2023

($ in billions, nominal and adjusted)



Sources: CRS, from NOAA budget justifications, congressional explanatory statements, and OMB, *Historical Tables, Table 10.1*.

Notes: ORF = operations, research, and facilities; PAC = procurement, acquisition, and construction. Lighter shaded areas denote amounts adjusted for inflation. Direct obligations include appropriations, transfers, and recoveries from prior year obligations.

Issues for Congress

According to NOAA's FY2023 budget summary, the requested budget focuses on climate products and services, economic development, equity and workforce, satellites, and facilities. The largest portion of the funding increase was requested for satellites, followed by climate products and services, and economic development activities.

Satellite Operations

NOAA, through NESDIS, manages several portfolios of environmental satellites. The agency requested nearly $2.28 billion for NESDIS in FY2023, an increase of $758.7 million above the FY2023 base level (**Table 1**). NOAA's largest proposed increase was $654 million for the Geostationary Extended Observations (GeoXO) program, which contributes data to weather forecasts and detects and monitors environmental hazards (e.g., wildfires, smoke, fog).

In FY2023, NOAA proposed to reduce Polar Weather Satellite (PWS) activities by $253 million. It also requested to continue reorganizing the budget structure of NESDIS by creating two new subactivities (LEO and SW). NOAA has proposed these changes in FY2022, which Congress largely approved. (The NOAA FY2023 budget request was released and the FY2022 appropriations bill was enacted in March 2022.)

Table 1. NOAA Direct Obligations and Appropriations for Discretionary ORF and PAC Accounts

($ in millions, nominal)

Line Offices and CPF/CDS Funding	FY2022 Enacted	FY2023 Base Level[a]	FY2023 Request	FY2023 Enacted
NESDIS	1,617.1	1,524.2	2,282.9	NA
NMFS	1,016.0	1,020.8	1,106.4	NA
NOS	649.2	650.1	695.4	NA
NWS	1,281.7	1,282.1	1,323.4	NA
OAR	647.9	630.2	774.8	NA
OMAO	436.8	395.3	417.7	NA
Mission Support	376.5	379.0	595.6	NA
CPF/CDS	84.4	NA	NA	NA
Total Direct Obligations[b]	**6,109.5**	**5,881.7**	**7,196.2**	**NA**
Total Appropriations[c]	**5,830.0**	**5,502.3**	**6,816.9**	**NA**

Sources: CRS, using the explanatory statement accompanying P.L. 117-103 and NOAA, *Budget Estimates Fiscal Year 2023, Congressional Submission*.

Notes: CPF/CDS = community project funding/congressionally directed spending; NA = not available/not applicable; ORF = operations, research, and facilities; PAC = procurement, acquisition, and construction.

a. NOAA calculated the FY2023 base level as equal to the FY2022 continuing resolution amount plus expected "Adjustments-To-Base," such as certain inflationary adjustments.

b. *Total Direct Obligations*, or total program or funding level, include annual appropriations, transfers, and recoveries from prior year obligations but exclude any supplemental appropriations. Components may not sum to totals shown due to rounding.

c. *Total Appropriations* are a part of the total direct obligations. *Total Appropriations* include annual appropriations but exclude any supplemental appropriations.

Climate Products and Services

NOAA requested $350 million above the FY2023 base level, across the line offices, to implement Executive Order 14008, "Tackling the Climate Crisis at Home and Abroad." The largest proposed increases would add to OMAO's days at sea to collect data ($27 million increase; total request of $202 million), fund research and development related to high-performance computing in OAR ($25 million increase; total request of $28 million), and optimize and upgrade the program used to disseminate NWS observations, model guidance, forecasts, and watch and warning information ($25 million increase, $108 million total request).

The agency proposed other changes to climate-related activities. For example, NOAA proposed to halt the use of base funding ($34 million) for the National Coastal Resilience Fund and instead use monies from IIJA to fund the program. It also requested to pause implementation of the COASTAL Act of 2012 (P.L. 112-141), co-managed with the Federal Emergency Management Agency, regarding assessments of wind versus water damage from a tropical cyclone (for a total of $5 million in savings). In FY2022, NOAA requested and Congress provided reduced funding for implementation of the COASTAL Act of 2012.

Economic Development

NOAA requested $212 million above the FY2023 base level, across NESDIS, NMFS, NOS, OAR, and MS, for activities to "foster environmental stewardship and sustainable economic development, with a particular focus on the New Blue Economy." The agency requested the largest increases under this theme to improve space situational awareness (i.e., keeping track of objects in orbit) in the Office of Space Commerce ($78 million increase, $88 million total request); procure and evaluate phased array radar technology, as a potential replacement for the current NEXRAD radar network, in OAR ($40 million in total); and establish a national program to mitigate the effects of offshore wind energy activities on NMFS scientific surveys ($17 million in total).

Eva Lipiec, Analyst in Natural Resources Policy

IF12156

Disclaimer