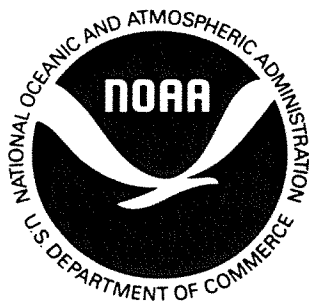


NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION



**BUDGET
ESTIMATES
FISCAL YEAR 2018**

CONGRESSIONAL SUBMISSION

PRIVILEGED

**The information contained herein must not be disclosed
outside the Agency until made public by the President or by
the Congress.**

PROGRAM CHANGES FOR FY 2018:

Observations: Reduce Surface and Marine Observations (Base Funding: \$92,829,000 and 99 FTE; Program Change: -\$25,989,000 and 0 FTE): NOAA requests a decrease of \$25,989,000 and 0 FTE for a total of \$66,840,000 and 99 FTE. This program change reduces the scope and operations of surface and marine observations platforms.

Proposed Actions:

NOAA will reduce the National Mesonet Program (within the Surface Observations Program) and the Deep-ocean Assessment and Reporting of Tsunamis (DART®), Tropical Atmosphere Ocean (TAO), and the Weather and Oceans Platforms (within the Marine Observations Program). Specific changes include the following:

Surface Observations Program (decrease of \$11,489,000 for a total of \$35,422,000): The National Mesonet Program (page NWS-9) gathers "mesoscale meteorological" observations that can identify rapidly deteriorating weather conditions not identified by other observation platforms. NOAA will reduce the geographic scope from all 50 states to prioritize states most susceptible to tornadoes and severe weather and limit the observations to surface meteorological observations and lightning.

The Marine Observations Program (decrease of \$14,500,000 for a total of \$31,418,000): DART® moorings (page NWS-9) collect data that is used by NWS' Tsunami Warning Centers to prepare and refine tsunami watches and warnings covering all U.S. territories and coastal states. In addition, NOAA funds targeted water level and seismic gauges to address gaps in leveraged data sets from partners such as the US Geological Survey. NOAA will eliminate funding (\$12 million) for the DART® mooring network as well as the targeted seismic and water level data. This termination is anticipated to have a 20 percent or greater impact on the accuracy, certainty, and timeliness of NOAA's tsunami watches and warnings.

The Weather and Ocean Platform (page NWS-9) network provides forecasters with frequent, high-quality marine observations for forecast and warning preparation (including for hurricanes) and verifies forecasts after they are produced. NOAA will eliminate seven buoys (\$1.2 million) that are farthest from U.S. shores in the Atlantic Ocean and the most costly to operate while maintaining 80 percent network availability for the remaining network of 142 meteorological and ocean observing platforms. The ocean surface data provided by these buoys currently is the only ground-truth measurement of surface weather conditions in tropical cyclones. Instead, NOAA would rely on satellite and aircraft data to obtain this information.

The TAO array (page NWS-9) studies and monitors climactic variations that have profound impacts on the Nation's weather. NOAA will reduce the 55-buoy array by 15 (\$1.3 million) while maintaining 80 percent availability for the remaining network. This reduction may delay recognition of the onset of an El Niño and the Southern Oscillation (ENSO) phenomenon and increase the uncertainty of seasonal weather forecasts issued around the world, in turn delaying the ability to mitigate impacts of drought or other conditions signaled by the ENSO phenomenon.

Resource Assessment:

The Surface Observation Program provides meteorological observations from on-the-ground stations and the Marine Observation Program provides meteorological, climatological, and tsunami data in the open ocean and coastal zones. This 12 percent reduction to these portfolios will eliminate more costly and/or lesser priority observations. This will reduce observation

diversity, while maintaining most core functions. The elimination of the tsunami observation data is consistent with overall cuts to the Tsunami Warning Program.

Schedule and Milestones:

FY 2018-2022

- Reduce scope of the National Mesonet Program to highest priority geographic extent and observations that support severe weather watches and warnings
- Terminate the Tsunami DART® moorings as well as the targeted seismic, and water level gage support, most particularly in Alaska, Hawaii, and Puerto Rico
- Reduce Weather and Ocean Platform network by seven buoys and maintain the remaining 142 at 80 percent availability
- Reduce TAO Array by 15 buoys, maintaining the remaining 40 at 80 percent availability

Analyze, Forecast and Support: Reduce Tsunami Warning Program (Base Funding: \$19,481,000 and 40 FTE; Program Change: -\$11,000,000 and -25 FTE): NOAA requests a decrease of \$11,000,000 and 25 FTE for a total of \$8,481,000 and 15 FTE. This program change streamlines NOAA's Tsunami Research and Operational Warning program and merges the Pacific Tsunami Warning Center (PTWC) in Hawaii and the National Tsunami Warning Center (NTWC) in Alaska.

Proposed Actions:

NOAA proposes to continue to fund critical tsunami program components to ensure high-quality tsunami watches, warnings, and advisories. This reduction eliminates partner funding for education and awareness programs including grant funding to local education, awareness, and inundation and evacuation map development. NOAA will continue to explore options in the 2010 National Academies of Sciences report, *Tsunami Warning and Preparedness: An Assessment of the U.S. Tsunami Program and the Nation's Preparedness Efforts*, to merge the two Tsunami Warning Centers or co-locate them with (1) academic or scientific institutions or (2) warning or mission-critical centers such as at the National Centers for Environmental Prediction.¹

This program change request is in coordination with the elimination of the DART® stations that provide tsunami observations and the sea level and seismic networks formerly supported through the NWS Observations PPA. Warnings will still be issued; however timeliness and accuracy will be reduced.

Resources Assessment:

The Tsunami Warning Program generates timely and precise tsunami-related data, conducts modeling research to improve warnings, and assists coastal communities with efforts to assess and communicate risk and mitigate potential impacts. The program communicates with a variety of national and international partners.

Schedule and Milestones:

FY 2018-2022

- Merge the Pacific Tsunami Warning Center (PTWC) in Hawaii and the National Tsunami Warning Center (NTWC) in Alaska
- Operate the Tsunami Warning Center (TWC) to monitor and predict the development, onset, and impacts of tsunamis along the Nation's coasts

Deliverables:

- Continued 24/7 operations and maintenance of a Tsunami Warning Center

¹ <https://www.nap.edu/read/12628/chapter/8#188> and <http://dels.nas.edu/Report/Tsunami-Warning-Preparedness-Assessment/12628>

PROGRAM CHANGE PERSONNEL DETAIL

Program: National Weather Service
Sub-program: Analyze, Forecast, and Support
Program Change: Reduce Tsunami Warning Program

Title:	Location	Grade	Number of Positions	Annual Salary	Total Salaries
Admin Support Assistant	TBD	GS-08	(1)	\$63,259	(63,259)
Computer Scientist	TBD	GS-13	(1)	\$119,486	(119,486)
Director	TBD	GS-15	(1)	\$167,432	(167,432)
Electronics Systems Analyst	TBD	GS-13	(1)	\$119,486	(119,486)
Electronics Technician	TBD	GS-12	(1)	\$101,324	(101,324)
Electronics Technician	TBD	GS-11	(1)	\$84,534	(84,534)
Geophysicist	TBD	GS-14	(2)	\$141,379	(282,758)
IT Specialist	TBD	GS-13	(2)	\$119,486	(238,972)
Oceanographer	TBD	GS-14	(1)	\$141,379	(141,379)
Oceanographer	TBD	GS-13	(2)	\$119,486	(238,972)
Oceanographer	TBD	GS-12	(1)	\$101,324	(101,324)
Physical Scientist	TBD	GS-14	(3)	\$141,379	(424,137)
Physical Scientist	TBD	GS-13	(7)	\$119,486	(836,402)
Tsunami Warning Science Officer	TBD	GS-14	(1)	\$141,379	(141,379)
Subtotal			<u>(25)</u>		<u>(\$3,060,844)</u>
Less Lapse	0%		<u>0</u>		<u>\$0</u>
Total Full-time permanent:			(25)		(\$3,060,844)
2018 Pay Adjustment	1.9%				(\$58,156)
TOTAL			(25)		(\$3,119,000)

Personnel Data

Full-time Equivalent Employment
 Full-time permanent
 Other than full-time permanent
Total

Number

(25)
0
0
(25)

Authorized Positions:
 Full-time permanent
 Other than full-time permanent
Total

(25)
0
0
(25)

PROGRAM CHANGE DETAIL BY OBJECT CLASS
(Dollar amounts in thousands)

Budget Program: National Weather Service
Sub-program: Analyze, Forecast, and Support
Program Change: Reduce Tsunami Warning Program

Object Class	FY 2018 Decrease	FY 2018 Total Program
11 Personnel compensation		
11.1 Full-time permanent	(\$3,119)	\$278,485
11.3 Other than full-time permanent	0	790
11.5 Other personnel compensation	0	23,013
11.6 Leave Surcharge Full-Time	0	0
11.8 Special personnel services payments	0	0
11.9 Total personnel compensation	(3,119)	302,288
12 Civilian personnel benefits	(381)	102,777
13 Benefits for former personnel	0	237
21 Travel and transportation of persons	0	5,074
22 Transportation of things	0	3,169
23.1 Rental payments to GSA	0	4,464
23.2 Rental Payments to others	0	5,528
23.3 Communications, utilities and misc charges	0	11,396
24 Printing and reproduction	0	112
25.1 Advisory and assistance services	0	12,713
25.2 Other services	0	17,369
25.3 Purchases of goods & services from Gov't accounts	0	1,657
25.4 Operation and maintenance of facilities	0	0
25.5 Research and development contracts	(1,500)	0
25.6 Medical care	0	0
25.7 Operation and maintenance of equipment	0	0
25.8 Subsistence and support of persons	0	0
26 Supplies and materials	0	4,358
31 Equipment	0	1,909
32 Lands and structures	0	1,304
33 Investments and loans	0	
41 Grants, subsidies and contributions	(6,000)	6,338
42 Insurance claims and indemnities	0	0
43 Interest and dividends	0	0
44 Refunds	0	0
99 Total obligations	(11,000)	480,693

* Due to financial system limitations, the object class detail for Total Program reflects the full AFS PPA.