



National Oceanic and Atmospheric Administration

FY 2009

Budget Summary

February 4, 2008

Cover: Pancake ice adrift on the Ross Sea, Antarctica. January 1999. Photographer: Michael Van Woert

NOAA

“Protecting Lives and Livelihoods”

NOAA’s VISION

An informed society that uses a comprehensive understanding of the role of the oceans, coasts, and atmosphere in the global ecosystem to make the best social and economic decisions.

NOAA’s MISSION

To understand and predict changes in Earth’s environment and conserve and manage coastal and marine resources to meet our Nation’s economic, social, and environmental needs.

NOAA’s CORE VALUES

*People, Integrity, Excellence, Teamwork, and Ingenuity
Science, Service, and Stewardship*



To the Reader:

I am pleased to present the Budget Summary for the National Oceanic and Atmospheric Administration (NOAA) for Fiscal Year 2009. As in the past, this summary is designed to provide information in a concise and user-friendly format. We provide these descriptions and data on NOAA's budget and programs for the information of members of Congress and their staffs, the media, and NOAA's constituents and customers. This summary describes how NOAA supports and enhances the goals of the Commerce Department and the President.

NOAA is where science gains value for the Nation. As the stresses upon our natural resources grow, NOAA continues its pursuit to increase that value and protect lives and livelihoods for all Americans. Americans depend upon NOAA for a wide variety of services and support, including the local weather forecast, a sustainable supply of quality seafood, the safe transport of millions of tons of waterborne cargo, a safe and vibrant coastline, and detailed research on the climate from the frozen arctic to the depths of the oceans. Through our newly updated website at www.noaa.gov, NOAA provides a wealth of knowledge to the general public, as well as to schools, industry, and scientific enterprises.

This year has seen increased attention to the phenomenon of global climate change, as well as continued emphasis on the need to conserve and restore our natural resources and the state of our oceans and coasts. The challenges facing the nation are evolving, but so too are the technologies that can help us meet those challenges, create solutions, and produce results.

NOAA is a critical part of the Nation's economy — its products and services impact the daily lives of every one of our citizens, and are tied directly to promoting the economic vitality of our country. In fact, weather and climate-sensitive industries account for about 33 percent of the Nation's GDP — about \$4 trillion of the American economy in 2006. Drought is estimated to result in average annual losses to all sectors of the economy of \$6-8 billion. The integrated and sustained observations of the Earth's physical and biological systems, and the web of science and management that forms the foundation of NOAA exploration and observation missions, work together to allow us to improve our understanding of the complex interactions taking place on our planet.

The major issues we face today are complex and involve the global community. In order to resolve future problems, we continue to build a NOAA that leverages partnerships and is responsive to constituent concerns. Using the President's Ocean Initiative as the foundation, we are developing new approaches to ocean management — approaches that will require a sustained effort to improve processes government-wide and implement a cross-cutting, ecosystems-based approach to management. These new approaches will make the oceans, coasts, and Great Lakes cleaner, healthier, and more productive, while ensuring that these valuable resources are available for current and future generations to enjoy.

Under the leadership of Commerce Secretary Carlos Gutierrez, NOAA remains committed to improving the level of service provided to the American people. Finally and most importantly, we appreciate the support NOAA continues to receive from the members of Congress and our constituents.

A handwritten signature in black ink that reads "C. Lautenbacher, Jr." The signature is written in a cursive, flowing style.

Conrad C. Lautenbacher, Jr.
Vice Admiral, U.S. Navy (Ret.)
Under Secretary of Commerce for
Oceans and Atmosphere



Organization Chart

U.S. DEPARTMENT OF COMMERCE

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

Exhibit 1 to
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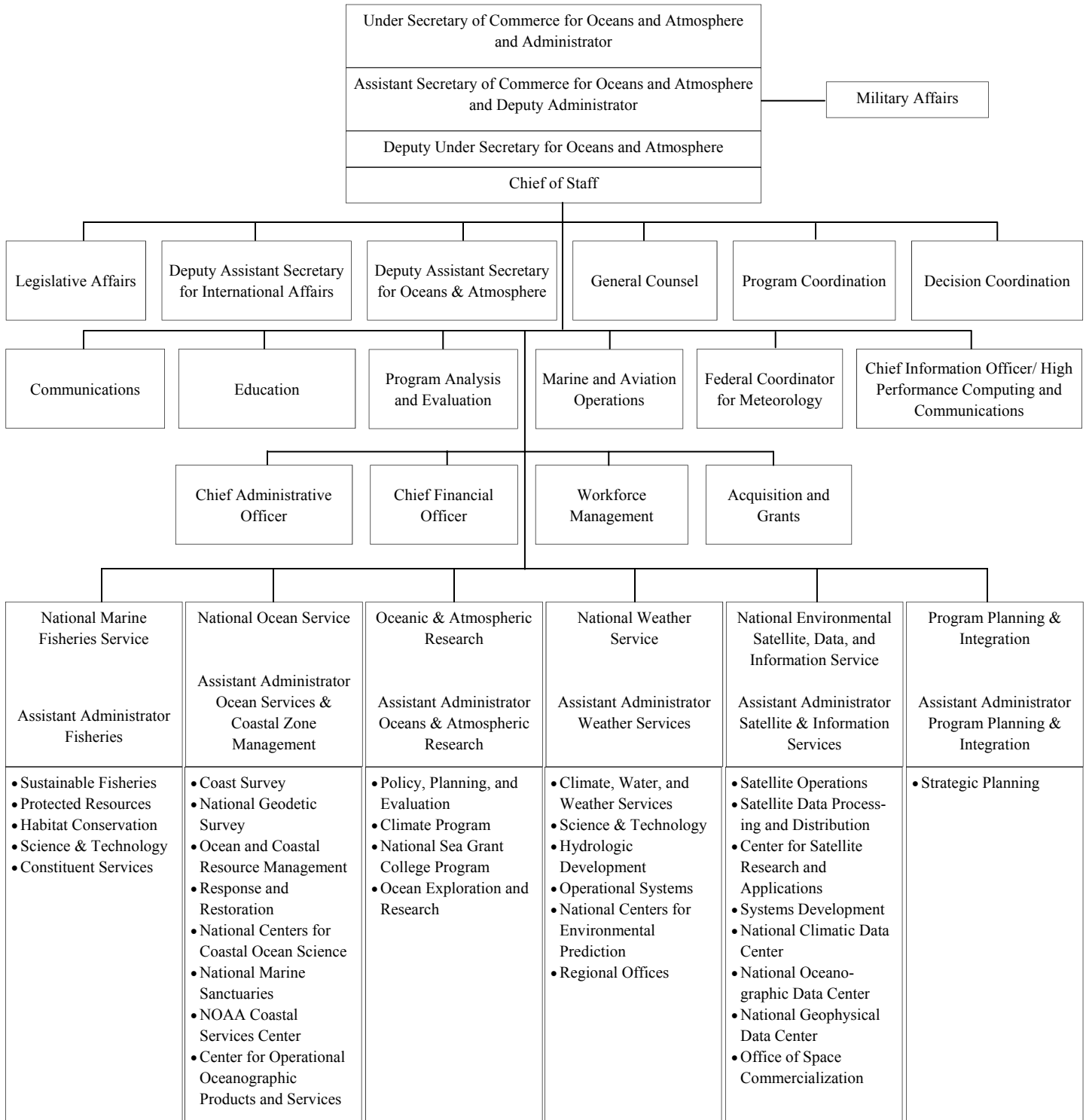




TABLE OF CONTENTS

Introduction	iii
2007 Accomplishments and Performance Results	Chapter 1
Program Changes Summary Table	Chapter 2
NOAA Operations, Research, and Facilities by Line Office	Chapter 3
National Ocean Service.....	3-2
National Marine Fisheries Service.....	3-14
Office of Oceanic and Atmospheric Research.....	3-26
National Weather Service.....	3-34
National Environmental Satellite, Data, and Information Service....	3-46
Program Support.....	3-50
NOAA Procurement, Acquisition, and Construction	Chapter 4
Systems Acquisition.....	4-4
Construction.....	4-14
Fleet.....	4-19
Other Accounts	Chapter 5
Other Discretionary.....	5-2
Other Mandatory	5-6
Special Exhibits	Chapter 6
Summary by Appropriation.....	6-2
Adjustments to Current Programs	6-4
Marine & Aviation Operations – Planned Operating Days	6-5
NOAA Estimated Federal Funds for R&D	6-6
A Note on Terminology.....	6-10
NOAA Control Table	Chapter 7



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Introduction

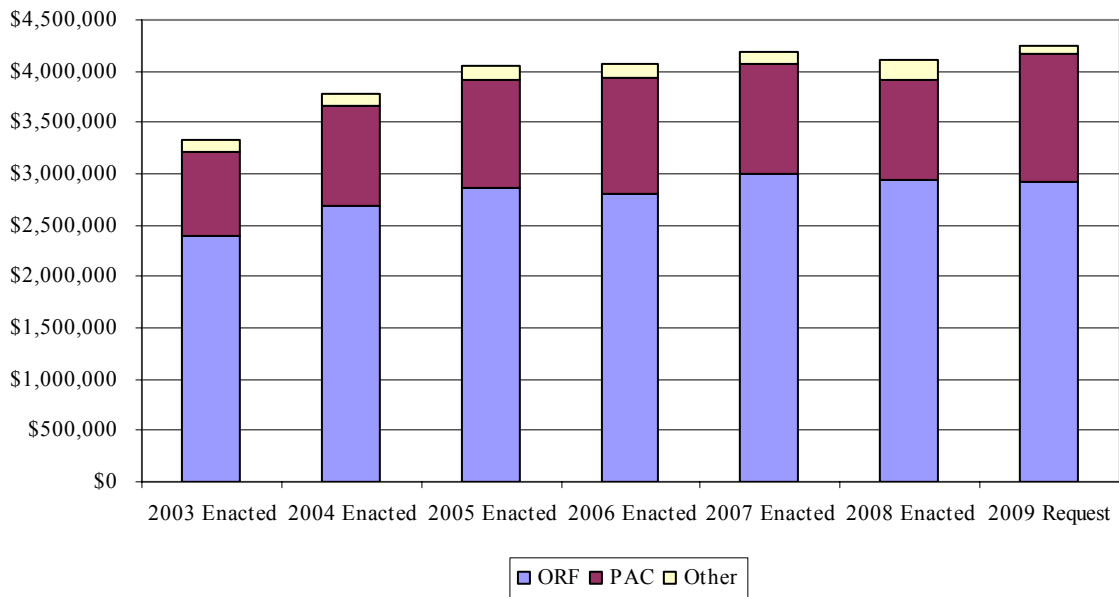


Introduction

(Dollars in Thousands)	FY 2007 Enacted	FY 2008 Enacted	FY 2009 Request	Increase (Decrease)
National Oceanic & Atmospheric Administration				
Operations, Research and Facilities	\$2,990,828	\$2,941,042	\$2,924,253	-\$17,835
Procurement, Acquisition and Construction	1,085,032	979,207	1,240,660	262,432
Other Funds	116,165	155,243	95,918	(59,258)
Financing	(126,491)	(168,206)	(150,984)	17,222
Total NOAA Discretionary Appropriation	\$4,065,534	\$3,907,286	\$4,109,847	\$202,561
FTE	11,935	12,066	12,120	54

Budget Trends, FY 2003 – 2009

(Dollars in thousands)



ORF: Operations, Research, and Facilities
PAC: Procurement, Acquisition, and Construction
Other: Other Accounts



Introduction



In the Fiscal Year (FY) 2009 President’s Budget, the Department of Commerce’s National Oceanic and Atmospheric Administration (NOAA) requests a total of \$4,109,847,000 an increase of \$202,561,000 or 5.2 percent over the FY 2008 Enacted level. This request reflects NOAA’s continuing effort to better serve the American people through the advancement of mission-critical services. The NOAA staff of dedicated professionals, working with extramural researchers and our international partners, are extending our knowledge of climate change, expanding meteorological prediction capabilities, improving coastal resource management, charting more of our seas and coasts, and enhancing environmental stewardship.

Total requested Adjustments to Base (ATBs) are \$40,320,000. These adjustments focus on maintaining and investing in our workforce and supporting NOAA’s most important resource — our people. NOAA leverages this most valuable asset by applying our people’s knowledge, experience, ingenuity, and dedication to the challenges of the 21st century. With this increase, the FY 2009 base level will fund the estimated FY 2009 Federal pay raise of 2.9 percent and annualize the FY 2008 pay raise of 3.5 percent. The base level will provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration. Also included are technical adjustments to more accurately reflect the alignment of base resources with base programs.

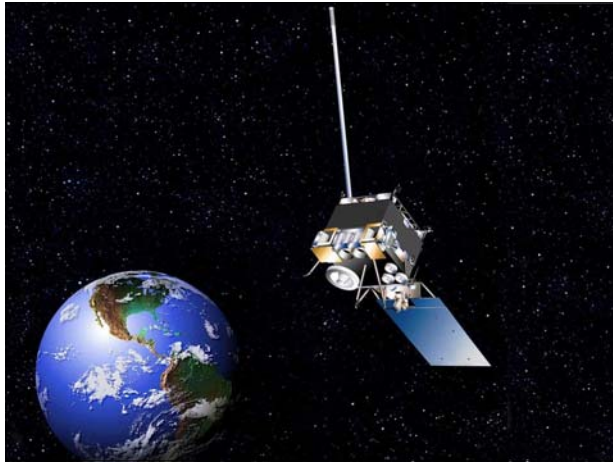
Priority Program Change Highlights

NOAA’s total requested program changes fall into two categories: Sustaining Critical Operations and priority program changes. The total requested program changes will include investments in four key areas: Supporting the President’s Ocean Initiative, Improving Weather Warnings and Forecasting, Climate Monitoring and Prediction, and Critical Facility Investments. Summaries of the highest priority items in this Budget Summary are highlighted throughout the rest of this section.



Sustaining Critical Operations

NOAA's core values are people, integrity, excellence, teamwork, ingenuity, science, service, and stewardship. Our ability to serve the nation and accomplish the missions outlined below is determined by the quality of our people and the tools they employ. Our facilities, ships, aircraft, environmental satellites, data-processing systems, computing and communications systems, and our approach to management provide the foundation of support for all of our programs.



Approximately \$42.0 million in net increases will support our workforce inflation factors, including **\$37.5 million** for salaries and benefits and \$4.5 million for non-labor-related adjustments, such as fuel costs. This year, we have focused our increases in this area on satellite continuity and additional operations and maintenance support for our aircraft and NOAA vessels. A funding increase of **\$242.2 million** is requested to continue support of the Geostationary Operational Satellites (GOES) – R program.

GOES satellites provide critical atmospheric, oceanic, climatic, and solar products supporting weather forecasting and warnings, climatologic analysis and prediction, ecosystems management, and safe and efficient public and private transportation. This increase will be used for continued systems engineering, development of satellite instruments, risk reduction activities, and transition to the systems-level acquisition and operations phase of the program. Funding of **\$6.1 million** is also requested in support of a Major Repair Period for the RAINIER, NOAA's most productive hydrographic vessel.

At 39 years old, the RAINIER requires a major capital investment in its mechanical and electrical systems in order to maintain its current operational tempo and reduce risks to personnel, property, and mission capability. Finally, NOAA requests an increase of **\$4.0 million** in support of additional flight hours and operations and maintenance for our aircraft. The requested funds will provide an additional 1,295 flight hours for hurricane research, surveillance, and reconnaissance, as well as for other research and forecasting requirements.



NOAA also asks this year for restoration to several of our base programs, most notably in the National Weather Service and the National Marine Fisheries Service. These requested increases in our base accounts will allow NOAA to complete projects that were anticipated in the



FY 2008 President's Budget but which are unable to be completed with the FY 2008 Omnibus Language.

1) Supporting the President's Ocean Initiative

Building on last year's investment in Ocean Action Plan related activities, the FY 2009 President's Request includes \$49.1 million in new increases in support of the President's Ocean Initiative. In response to the reauthorization last year of the Magnuson-Stevens Fishery Conservation and Management Act (MSRA), NOAA this year requests \$20.8 million in new funding in direct support of the additional requirements of the reauthorized bill. These requests, and others, are included within the three main areas of the Ocean Initiative: ocean science and research (\$17.8 million in new increases), protecting and restoring marine and coastal areas (\$5.0 million in new increases), and ensuring sustainable use of marine resources (\$26.3 million in new increases).

Ocean Science and Research:



New investments in ocean science are aimed at monitoring and better understanding marine ecosystems. Increased funding of **\$7.0 million** is included for the Integrated Ocean Observing System (IOOS) to support Data Management and Communications, Regional Observations, and the Data Assembly Center (DAC), which delivers real-time, quality controlled data from NOAA and regional observing systems. An increase of **\$1 million** is requested to manage the escalating size and quantity of hydrographic datasets collected by NOAA and other providers. This increase in funding will help NOAA update the nautical charts provided to mariners navigating on U.S. waters in a more timely fashion. In addition, NOAA is requesting **\$2 million** in increased funding for the PORTS[®] program, to improve and expand the delivery of real-time and forecasted navigation information.

A recent economic benefits study of the Houston/Galveston PORTS[®] program, released in May 2007, showed that the program brought the Houston/Galveston area significant economic benefits and has helped to achieve a 50 percent reduction in groundings.

Protecting and Restoring Marine Coastal Areas:

Projects to protect and restore valuable marine and coastal areas include funding of **\$4 million** to implement the newly enacted Marine Debris Research, Prevention, and Reduction Act. This funding will allow NOAA to provide competitive grants and to develop





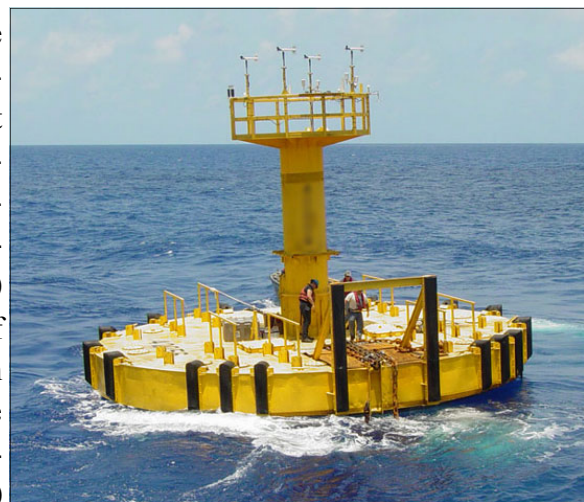
the first Federal clearinghouse on marine debris. NOAA also requests increased funding of **\$5.4 million** for the Open Rivers program to restore stream miles of fish habitat through watershed-level projects with multiple fish passage opportunities.

Ensuring Sustainable Use of Ocean Resources:

Finally, the budget provides support to ensure sustainable access to seafood through the development of offshore aquaculture and better management of fish harvests. In direct support of new provisions of the MSRA, and to provide better management of fish harvests, NOAA requests increased funding of **\$31.8 million**. Of this, **\$5.1 million** is requested to enhance the independent peer-review process for scientific data required to appropriately set the annual catch limits for all managed fisheries, **\$7.7 million** will initiate new and expand existing sampling programs and management procedures in order to end overfishing by the MSRA mandated FY 2011, and **\$2.7 million** will complete the final implementation phase of a new registry system for recreational fishermen and for-hire fishing vehicles. An additional **\$1.5 million** increase is requested in support of deep sea coral research, allowing NOAA to begin identifying, understanding, and providing the information needed in order to protect deep coral habitats.

2) Improving Weather Warnings and Forecasts

Severe weather events cause \$11 billion in damages and approximately 7,000 weather-related fatalities yearly in the United States. Nearly one-third of the U.S. economy is sensitive to weather and climate. Realizing this, NOAA seeks to provide decision makers with key observations, analyses, predictions, and warnings for a variety of weather and water conditions to help protect the health, life, and property of the U.S. and its economy. Landfalling hurricanes are one of the most physically destructive and economically disruptive extreme events that impact the U.S., often causing billions of dollars of damage in their wake. In FY 2009, NOAA will continue to improve our hurricane research and modeling capabilities with a requested increase of **\$4.0 million** for operational support and maintenance of the next-generation Hurricane Weather Research and Forecasting (HWRF) model and storm surge prediction system, as well as accelerated improvements to that system. Increased funding of **\$3.0**

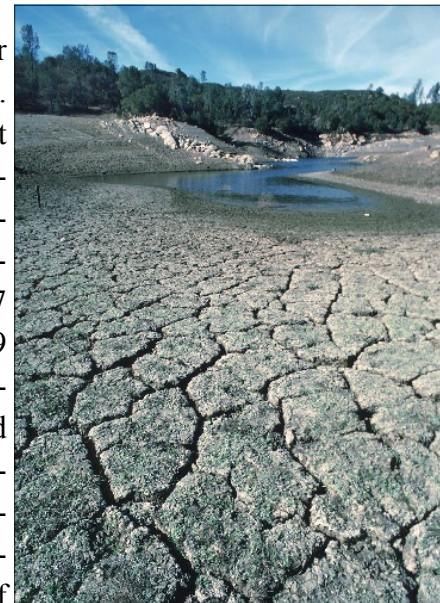




million will support the operations and maintenance of 15 hurricane data buoys in the Caribbean, Gulf of Mexico, and the Atlantic Ocean, enhancing our real-time hurricane storm monitoring and observations. NOAA also continues to improve and maintain our weather warning infrastructure, with requested funding of **\$6.6 million** to upgrade the Advanced Weather Interactive Processing System (AWIPS), the nation’s weather and flood warning system. Increased funding of **\$4.8 million** will be used to upgrade twelve NOAA Wind Profilers and to perform a tech-refresh on this twenty-year-old transmitter system. Finally, NOAA is requesting **\$2.9 million** in increased funding for modernization of the NOAA Weather Radio network.

3) Climate Monitoring and Prediction

Society exists in a highly variable climate system, and major climatic events can impose serious consequences on society. Preliminary estimates of the impact of the severe drought which affected the Great Plains and the Eastern U.S. throughout all of 2007 are in the range of \$5 billion, with major reductions in crop yields and low stream and lake levels. Continued drought and high winds in the Western U.S. in 2007 resulted in numerous wildfires, with 3,000 homes and over 8.9 million acres burned, and at least 12 deaths. Climate conditions change over the span of seasons, years, decades, and even longer, intersecting with a complexity of interdisciplinary issues ranging from ecosystems and resource management to agriculture, energy production, and responses to extreme weather events. NOAA continues to build a suite of



information, products, and services that will enable society to respond to changing climate conditions. In FY 2009, NOAA will support the critical National Integrated Drought Information System (NIDIS) with increases of **\$2 million** to develop and bring into operation by FY 2010 the next-generation Climate Forecast System, leading to improved climate forecasting products. An increase of **\$74 million** will be used to develop *Clouds and the Earth’s Radiant Energy System* (CERES) and *Total Solar Irradiance Sensor* (TSIS) climate sensors to preserve decades



long climate data records. The CERES sensor will measure the Earth’s radiation budget, an essential measurement for determining the causes of climate variability and change. The TSIS sensor measures the total energy of the sun falling on the Earth, a measurement used to identify and isolate natural solar variations that impact climate in contrast to other factors, such as human influences on climate.



4) Critical Facility Investments

NOAA continues to invest in our critical facility management and modernization efforts in order to provide a safe and efficient work environment for our employees. For FY 2009, NOAA will concentrate their modernization efforts on three main projects. NOAA requests **\$40.2 million** for the continued construction of the new Pacific Region Center on Ford Island in Honolulu, HI. This increase in funding will support the continued construction and renovation of two buildings, enabling NOAA to relocate operations from their current location in the deteriorating Kewalo Basin and Dole Street Lab Facilities. An increase of **\$12.1 million** will complete the design and initial preparations for a replacement facility for the Southwest Fisheries Science Center. Finally, **\$11.7 million** is requested to support the installation of a semi-permanent replacement structure for the at-risk Operations Complex at the NESDIS Command and Data Acquisition Station in Fairbanks, AK. The current facility is at risk to experience a major structural failure in the next five years; the requested funding will ensure that NOAA maintains crucial mission operations support for the polar-orbiting satellites, as well as backup support for others.



The program changes highlighted above will be addressed in greater detail in the remaining parts of the FY 2009 NOAA Budget Summary. We hope to build on our prior successes by addressing future challenges through implementing the management, operational, and technical enhancements proposed in this Summary.