

# National Oceanic and Atmospheric Administration



# FY 2007 Budget Summary

February 6, 2006

# 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 2007. 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.

As the stresses upon our natural resources grow to monumental proportions, as we have seen over the past year, NOAA continues its pursuit to protect lives and livelihoods for all Americans and the Nation. Americans look to NOAA for an

incredible variety of services and support ranging from the local weather forecast; to a sustainable supply of quality seafood; to the safe transport of millions of tons of waterborne cargo; to keep the ocean coastline safe and vibrant; and to maintain detailed research on the climate from the frozen arctic to the depths of the oceans. Through our website at <a href="www.noaa.gov">www.noaa.gov</a>, NOAA provides a wealth of knowledge to schools and young people across our Nation, as well as to industry and scientific enterprises.

The past year has seen natural disaster on an unprecedented scale. A tsunami destroyed communities and took thousands of lives in south Asia. A spate of hurricanes – Katrina, Rita, and Wilma, to name a few – did much the same on America's Gulf Coast. This year has also brought wider national recognition of the state of our oceans and continued attention to the phenomenon of global climate change. 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 our Nation's economy - its products and services impact the daily lives of every one of our citizens, and have economic consequences which significantly affect our Nation's Gross Domestic Product (GDP). In fact, NOAA touches 30% of the Nation's GDP directly - about \$3 trillion of the American economy. With integrated and sustained observations of the Earth's physical and biological systems, and the web of science and management which form the foundation of NOAA exploration and observation missions, we have the opportunity to better understand the complex interactions taking place on our planet.

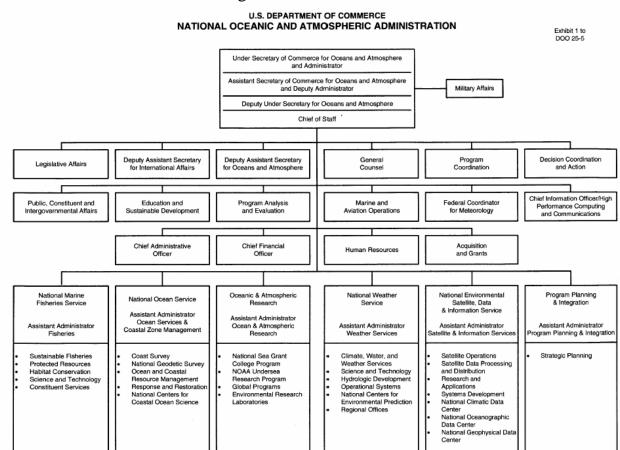
The major issues we face today are complex and affect everyone in the world. In order to resolve future problems, we continue to build a NOAA that leverages partnerships and is responsive to constituent concerns. The U.S. Commission on Ocean Policy has made it clear that new approaches are needed to manage the oceans. The future of oceans management will require a sustained effort to improving processes government-wide and implementing a cross-cutting, ecosystems-based approach to management that is focused on making the oceans, coasts, and Great Lakes cleaner, healthier and more productive and 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.

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

Oceans and Atmosphere

# **Organization Chart**



# A NOTE ON TERMINOLOGY:

The reader should be aware of the specific meaning of several terms as they are used throughout this budget summary:

# "FY 2006 Enacted" is:

Fiscal Year (FY) 2006 Appropriation, less rescissions, plus Supplemental funds.

# "FY 2007 Base" is:

FY 2006 Enacted, less Terminations, plus Adjustments to Base.

# "Total Request" is:

FY 2007 Base, plus Program Changes.



# TABLE OF CONTENTS

Introduction	iii
Strategic Outlook and FY 2005 Accomplishments by Goal	Chapter 1
FY 2005 Performance Measure Results	Chapter 2
Line Office Summary Budget Table	Chapter 3
NOAA Operations, Research and Facilities by Line Office	Chapter 4
National Ocean Service	4-2
National Marine Fisheries Service.	4-20
Office of Oceanic and Atmospheric Research	4-34
National Weather Service	4-48
National Environmental Satellite, Data and Information Service	4-58
Program Support	4-64
NOAA Procurement, Acquisition and Construction	Chapter 5
Systems Acquisition.	5-4
Construction.	5-15
Fleet	5-19
Other Accounts	Chapter 6
Other Discretionary	6-2
Other Mandatory	6-6
Special Exhibits Summary by Appropriation.	<b>Chapter 7</b> 7-2
Adjustments to Current Programs	7-4
FY 2006 Terminations	7-5
Marine & Aviation Operations – Planned Operating Days	7-11
NOAA Estimated Federal Funds for R&D	7-12
NOAA Control Table	

NOAA FY 2007 Budget Summary
[Page intentionally left blank]

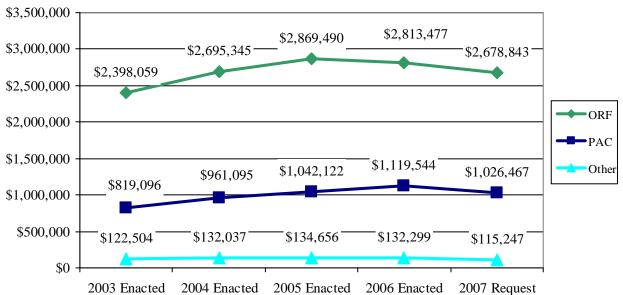
# Introduction

# Introduction

(Dollars in Thousands)	FY2006 Enacted	FY2007 Base	Program Changes	Total Request
National Oceanic & Atmospheric Administration				_
Operations, Research and Facilities	\$2,813,477	\$2,445,942	\$232,901	\$2,678,843
Procurement, Acquisition and Construction	1,119,544	914,013	112,454	1,026,467
Other Funds	132,299	115,247	0	115,247
Financing	(153,829)	(136,851)		(136,410)
				_
Total NOAA	\$3,911,491	\$3,338,351	\$345,355	\$3,684,147
FTE	11,956	11,963	66	\$12,029

# Budget Trends, FY 2003 - 2007

(Dollars in Thousands)



ORF: Operations, Research & Facilities

PAC: Procurement, Acquisition & Construction

Other: Other accounts

# Introduction



In the Fiscal Year (FY) 2007 President's Budget, the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) requests a total of \$3,684,147,000 a decrease of \$227,345,000 or 5.8% below the FY 2006 Enacted Budget. The request is, however, an increase of \$345,355,000 or 10.3% above NOAA's FY 2007 Base. This FY 2007 request reflects our continuing effort to better serve the American people through advancing mission-critical services. The NOAA staff of dedicated professionals, working with extramural researchers and our international partners, are extending our knowledge of climatic 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 \$29,649,000, which are included in the FY 2007 Base level of \$3,684,147,000. These adjustments focus on maintaining and investing in our workforce and supporting NOAA's most important resource – our people. With this increase, the FY 2007 base level will fund the estimated FY 2007 Federal pay raise of 2.2 percent and annualize the FY 2006 pay raise of 3.1 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.

# **Priority Program Change Highlights**

The requested total NOAA program changes focus on key themes running through this budget, including integration (at both the organizational and systems levels), partnerships, and early identification of the essential support requirements implicit in NOAA's long-range plans. Scientific research, advanced technology development and operations remain the cornerstones of everything we do.

This budget submission requests the necessary level of resources to carry out NOAA's missions in ways that benefit (1) public safety, (2) the economy, and (3) the environment of the Nation. NOAA is requesting investments in high priority endeavors – specifically, for delivering effective climate and oceanographic products and services, and to enable resource managers to appropriately allocate resources. A summary of the highest priority

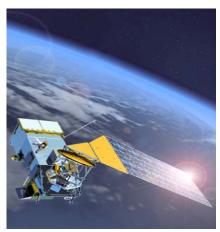
items in this Budget Summary follow.

### **People and Infrastructure**

NOAA's core values are people, integrity, excellence, teamwork, ingenuity, science, service and stewardship. Our ability to serve the Nation is determined by the quality of our people and the tools they employ. This year, we focus on the operations and maintenance of NOAA vessels and critical enhancements to marine safety, facility repair and modernization. Approximately \$29.6 million in net increases will support our workforce inflationary factors such as the pay raise. Increased funding of \$6.5 million will support Marine operations for the operating tempo for NOAA ships. Funds of

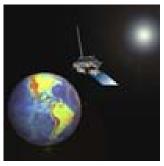


**NOAA Vessel** 



**NPOESS Orbiter** 

\$13.8 million will be used to modernize our fleets. Critical marine safety enhancements will also be increased by \$1.8 million. NOAA's satellite systems are also an important component of our infrastructure. Increased funding of \$113.4 million for the next generation of



**GOES-R** 

geostationary satellites, GOES-R, will contribute to improved characterization of the atmosphere, increased image resolution for valuable coastal regions, and

improved understanding of climate variability and change. An increase of \$20.3 million in NPOESS continues our investment in the tri-agency program. NPOESS will provide real-time global and regional imagery, along with meteorological, climactic, terrestrial, oceanic and geophysical data. NPOESS data will also provide military leaders with improved situational awareness through improved coverage and distribution of atmospheric and space environmental conditions. Lastly, funds of \$12.0 million will be used to make improvements to the U.S. Tsunami Warning Network will be used to make improvements to the U.S. Tsunami Warning Network. Strengthening the Tsunami Warning Program provides effective, community-based tsunami hazard mitigation actions including required inundation flood mapping, modeling and forecasting efforts (MMFE) and evacuation mapping, and community-based public education/awareness/preparedness for all U.S. communities at risk.

### **Ecosystems Management**



NOAA provides national and global leadership in ocean and coastal resource conservation in order to insure their contribution to societal and economic values, today and in the future. Focusing on an ecosystem approach, NOAA carries out sciencebased conservation and management are collaborative, programs that adaptive, and responsive to diverse societal needs. With increases of \$14 million, we will expand assessments of fish stocks and protected species,

particularly in the Southeast region, and restore vital habitats. With an additional \$7.0 million in increases, we will expand economics and social science research to improve economic performance of the Nation's fisheries.

### **Climate Services**

Society exists in a highly variable climate system. Conditions change over the span of seasons, years, decades, and longer, intersecting with complex interdisciplinary issues ranging from ecosystem and resource management to agriculture, energy production, and responses to extreme weather and climate events. We are building a suite of information, products and services, to enable society to respond to changing climate conditions. We will continue to expand and improve access to global oceanic and atmospheric data sets for improved climate prediction and development of climate change indicators. Further, we will investigate how society can best cope with sustained drought conditions resulting from changes in climate. NOAA is committed to expanding climate services for the external and internal user communities. Specific activities focus on supporting drought impact research for the National Integrated Drought Information System (NIDIS) and Regional Decision Support Partnerships with increases of \$4.0 million; developing new climate re-analysis data sets to improve operational climate prediction with increases of \$2.0 million; and sustain data archive, access, and assessment activities with increases of \$6.7 million. Many of these activities will contribute to the Climate Change Science Program Synthesis and Assessment reports.

### **Weather and Water Information**

Weather has a direct impact upon public safety and nearly one third of the Nation's economy. Our role in observing, modeling, forecasting, and warning of environmental events is expanding. We will strengthen our ability to warn against tsunamis, hurricanes, tornadoes and other weather events by collecting more data with buoy systems, new aircraft instrumentation, and the NOAA Profiler Network. The National Weather Service Telecommunications Gateway ensures that NOAA obtains and distributes valuable hydrometeorological information. Severe weather events cause \$11 billion in damages

yearly in the United States. The health and safety of the public is directly affected by the weather and 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. Some of the particular program increases within this goal are frequency conversion for the NOAA Profiler Network with \$3.5 million; the National Weather Service Telecommunications Gateway with \$2.5 million; and operate and maintain hurricane data buoys in the Caribbean, Gulf of Mexico, and the Atlantic Ocean with \$1.4 million.



**Buoy Mounted Wind Profiler** 

### **Commerce and Transportation**

NOAA's information services are essential to the safe and efficient transport of people and goods at sea, in the air, and on land. Tide current observations, and mapping and charting products, aviation, surface and marine weather forecasts. positioning accurate capabilities: these are among the critical services NOAA provides to keep the Nation's economy moving. NOAA seeks to protect lives, economic investment and environmental integrity by improving its mapping and



NRT in Port Allen Lock

charting capabilities, strengthening our national water level observation network, and enabling observation stations to better withstand the damaging power of hurricanes and other severe weather events. We will also bring the number of Navigation Response Teams (NRTs) to eight, completing full regional coverage and allowing a 24-hour response time to all ports in the contiguous U.S. Funding will also support the continued expansion of the Physical Oceanographic Real-Time System (PORTS®) network with

\$715,000 in increases, and with increases of \$1.2 million, NOAA's multi-year effort to improve aviation weather forecasts by increasing the number of water vapor sensors delivering data to the Integrated Upper Air Observing system will be supported.

### **Facilities Construction**

To effectively support NOAA's mission and operations, and to provide a safe working environment for NOAA's employees, NOAA is placing increased emphasis on it Facilities Management and Modernization program. Of particular importance this year is NOAA's Center for Weather & Climate Prediction with \$11.0 million in increases.

The program changes highlighted above will be addressed in greater detail in the remaining parts of the FY 2007 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.

Λ	NOAA FY 2007 Budget Summary
[Page intentionally left blank	

# Chapter 1

# Strategic Outlook and FY 2005 Accomplishments by Goal

# Strategic Outlook and FY 2005 Accomplishments by Goal

# Strategic Outlook

The strategic outlook identifies the most urgent and compelling programmatic and managerial priorities for the next five years. Each year, NOAA's planning processes provide an opportunity to assess our progress, accommodate new developments and events within and outside NOAA, and adjust our program emphases to ensure progress toward our strategic goals:

- Protect, restore, and manage the use of coastal and ocean resources through an ecosystem approach to management.
- Understand climate variability and change to enhance society's ability to plan and respond.
- *Serve society's needs for weather and water information.*
- Support the Nation's commerce with information for safe, efficient, and environmentally sound transportation.
- Provide critical support for NOAA's mission.

For NOAA to maximize societal benefits, it must continuously calibrate its programmatic and managerial priorities. The priority areas listed below have been derived from input from NOAA's stakeholders, as well as, internal analyses of mission requirements, external trends and drivers, program capabilities, and alternative solutions to achieving NOAA's strategic goals. Each is NOAA-wide in nature; it transcends disciplines and organizations, requires significant and sustained financial or managerial resources, and has a singular impact on NOAA's ability to achieve its long-term strategic goals.

# NOAA Wide Accomplishments

# NOAA Provided Critical Information and Support Before and After Hurricane Katrina

Within 48 hours of landfall on the central Gulf coast, all NOAA National Hurricane Center forecasts indicated that Katrina would come ashore in southeastern Louisiana. NOAA accurately predicted the path of this hurricane in advance of landfall, enabling governments to initiate mass evacuations. During Katrina, NOAA collected accurate tide and current information on storm surge that will be



invaluable to engineers planning the recovery and rebuilding of the coasts according to standards safe for people and the environment. NOAA provided thousands of before and after Katrina images using high-resolution aerial photography that provided critical help to damage assessment teams and emergency recovery operations. NOAA's mapping and charting services acted immediately after the storm to find navigation obstructions that might impede maritime commerce and delivery of critical supplies to stricken populations. Overall, NOAA conducted 13 surveys for major ports and rivers. Specifically, areas surveyed included: the Mississippi River; Lake Charles; Bayou Labarte; and the following ports: Pascagoula; Biloxi; Mobile; New Orleans; Pensacola; Gulfport; Houston; Galveston; Arthur; and Port Fourchon. NOAA analyzed satellite imagery of the area to determine coastal impacts (e.g., amount of land inundated and wetland loss.) NOAA assisted the State of Louisiana Department of Wildlife and Fisheries Enforcement agents in security and safety matters involving marine rescues through the provision of NOAA enforcement agents and vessels. NOAA determined a commercial fishery failure and a fishery resource disaster in the Gulf of Mexico which will enable additional assistance to be delivered. Further, NOAA helped provide emergency response for more than 200 hazard incidents, including several Superfund hazardous waste sites.

### **NOAA** Led the Advancement of Integrated Earth Observations Systems

NOAA led the approval and is leading the implementation of the *Strategic Plan for the US Integrated Earth Observation System* through the U.S. Group on Earth Observations (USGEO). USGEO, a standing subcommittee of the White House Committee on Environment and Natural Resources composed of 15 federal agencies and three White House offices, created the plan released in April 2005. NOAA then led a U.S. Public Engagement Workshop in May 2005 to discuss the plan and its implementation. On a parallel track, the Department continued to provide international leadership in Earth observations and helped to facilitate international agreement on the Global Earth Observation System of Systems (GEOSS). The 10-year implementation plan was adopted at the Third Global Earth Observation Summit, held in February 2005 in Brussels. By adopting the plan, the nations have accomplished the first phase of realizing the goal of a comprehensive, integrated, and sustained Earth observation system. The Department also played a vital role in the establishment of the permanent Group on Earth Observations (GEO) through membership on its Executive Committee and in the successful transition of its Secretariat from the United States to Geneva, Switzerland.

### **Ecosystems**

### **U.S Ocean Action Plan**

In December 2004, the Administration released the "U.S. Ocean Action Plan," a response to the U.S. Commission on Ocean Policy's report entitled, "An Ocean Blueprint for the 21st Century." NOAA worked with the Council on Environmental Quality and other federal agencies to develop the action plan. NOAA continued in FY 2005 to provide national and international leadership for the U.S. Ocean Action Plan by co-leading the

development of the U.S. Ocean Research Priorities Plan and Implementation Strategy (due December 31, 2006) and by supporting the establishment of the coordinated ocean governance structure. NOAA continued rebuilding fisheries and reducing capacity to improve food security, increase economic benefits, and improve stability of marine ecosystems. Other accomplishments included promoting the greater use of market-based systems for fisheries management and working to improve regional collaboration in partnership with state, local and tribal leadership. The Gulf of Mexico and the Great Lakes are areas that both benefited from the improved regional collaboration under the U.S. Ocean Action Plan.

### **Recovering Threatened and Endangered Salmon**

Efforts to conserve and recover the Nation's protected resources have made steady and sometimes dramatic progress, as reported in the National Marine Fisheries Service (NMFS) 2004 Biennial Report to Congress on the recovery program for threatened and endangered species, published in August 2005. In recent years, the abundance of both hatchery-reared and naturally spawning populations of listed salmon and steelhead has generally increased. Improvements



**Spawning Salmon** 

are seen in many salmon populations —16 of 26 species or evolutionarily significant units (ESU) of Pacific salmon are stable or increasing, six more than had been anticipated for this time.

### **NOAA Proposes Legislative Improvements**

NOAA transmitted to Congress a comprehensive package of amendments to reauthorize the Magnuson-Stevens Act and the Marine Mammal Protection Act, and proposed the National Offshore Aquaculture Act. The bills meet Administration commitments made in the December 2004 U.S. Ocean Action Plan and other key objectives and necessary improvements.

# NOAA Conducts Successful "Safe Sanctuaries" Exercise

In partnership with the U.S. Coast Guard, the State of Florida, Monroe County, and local response organizations, NOAA participated in a scenario which involved the simulated grounding of an 800 foot containership carrying 1,200,000 gallons of fuel in the Florida Keys National Marine Sanctuary. The exercise simulated the injuring of ecological and historical/cultural resources and two releases of oil and potentially unstable cargo. The exercise evaluated the



collective ability to deliver data, realtime observations, forecasts, and scientific expertise and assets to address protection of NOAA trust resources in the event of a major incident.

# NOAA Exploration of South Pacific Finds New Species and Magical Scenes; Sets Records for NOAA Undersea Research and Ocean Exploration

Hawaii Undersea Research Laboratory (HURL) and Ocean Exploration completed the longest and most challenging ocean expedition in HURL's 25-year history. The ship traveled 10,000 nautical miles and the Pisces submersibles made 67 dives, one as deep as 1,820 meters on the Brothers undersea volcano. The nearly five month long international expedition to explore a largely unknown region of the South Pacific ocean produced many discoveries, including numerous suspected new species, new ranges for known species, measurements of the diversity of marine life, and more data about undersea volcanoes and the rare interface of life based on sunlight with chemosynthetic organisms.

# **Climate**

# NOAA Advances Global Ocean Observing System (GOOS) with Deployment of Global Drifter 1250



First test of a radar wind profiler on a 10-m discus buoy



Scientist deploys a drifter buoy

In cooperation with interagency and international partners, NOAA advanced the global component of the GOOS past the 50 percent milestone. A major earth observation milestone was achieved when NOAA deployed Global Drifter 1250 near Halifax, Nova Scotia, and fully implemented the first component of the GOOS. This milestone also represented the first element of GEOSS to be completed. Drifters are vital for monitoring climate research and forecasts.

The global drifter buoy array is important because drifting buoys measure ocean temperature, currents and atmospheric pressure over the ocean. They also provide the primary calibration system, or 'ground truth,' for satellite measurement of sea surface

temperature, which is essential for climate, weather, and storm prediction. The scientific design for the global surface drifting buoy array calls for 1,250 buoys to be maintained worldwide based on the requirement for buoy measurement of sea surface temperature in combination with satellite measurement.

### **AgClimate Decision Support Tool**

NOAA-supported university scientists introduced AgClimate, a prototype decision support Web site (http://www.agclimate.org/) which includes several decision support tools. The current version of AgClimate includes (1) a tool which allows users to learn about risks associated with climate variability and El Niño/Southern Oscillation (ENSO) for their county; (2) crop risk tools for peanut, tomato, and potato to enable users from selected counties to learn how climate variability and ENSO affect these crops, as well as to view probabilities of how these crops will perform for a climate forecast; and (3) wildfire risk forecast for the forested areas of the Southeast.

# NOAA Assists the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report on Climate Change

NOAA's new state-of-the-art coupled climate model (CM2) provided massive amounts of data to the world's research communities for the IPCC Fourth Assessment Report on Climate Change (2007). The CM2 model was presented at several conferences and has been accepted for publication in peer-reviewed literature, and has been evaluated and revealed as one of the best in the world by a variety of measures.

### Presidential Rank Award given to NOAA Research Scientists

Dr. Venkatachala Ramaswamy, NOAA Geophysical Fluid Dynamics Laboratory, for his leadership and expertise in the understanding and quantification of the factors that change global climate and his ability to clearly communicate his results to the public and policy makers. Dr. Petrus P. Tans, NOAA Climate Modeling and Diagnostics Laboratory, for his discovery that it may be possible to increase carbon uptake on land, for example through the growth of trees, and through agricultural practices that increase the carbon content of soils.

# NOAA Develops Index that Demonstrates Changes in Ocean Productivity Linked to Climate Variability

The North Pacific Climate Regimes and Ecosystem Productivity Program developed a new index of the timing of ice retreat over the southern shelf to better predict changes in the ocean temperature, salinity, the timing of the spring bloom and ecosystem structure.

# Weather & Water

# NOAA Begins Expansion of U.S. Tsunami Warning Program; Accurately Predicts West Coast Tsunami

In response to the December 26, 2004 Indian Ocean tsunami, NOAA has begun to expand the U.S. Tsunami Warning Program. Using supplemental funding received in FY

2005, the multi-year implementation plan will improve the Tsunami Warning and Mitigation System and Tsunami Forecast System. Improvements in FY 2005 include: providing 24 hours a day, seven days a week (24/7) operations at NOAA Tsunami Warning Centers, seismic monitoring, and improved community preparedness through the Tsunami Ready program. NOAA also utilized the experimental Tsunami Forecast System to accurately predict a tsunami just off the coast of Oregon following an approximately 7.2 magnitude earthquake off of the northern California coast in June. The accurate forecast and measurement of the resulting tsunami enabled NOAA's Alaska Tsunami Warning Center to cancel its warning for the Oregon coast, which was issued five minutes after the earthquake struck.

# NOAA's Central Computer System (CCS) Runs with Full Backup

NOAA's National Centers for Environmental Prediction (NCEP) computer operations were moved to the new Weather and Climate supercomputer. The planned system upgrade to the computer, under the \$180 million nine-year contract, provides the necessary computational power to operate higher resolution numerical weather prediction models, coupled ocean-atmosphere models, operational climate models, and improved ensemble models. The new CCS, for the first time, is comprised of two identical, geographically separate systems, which will provide full backup capability for the entire suite of over five million numerical guidance products. While it serves as a full backup system the CCS enhances NOAA's supercomputing ability, providing higher resolution models which result in improved forecasts.

### **NWS Accurately Forecasts Most Active Atlantic Hurricane Season in History**

The 2005 Atlantic hurricane season was the busiest on record and extended the active hurricane cycle that began in 1995—a trend likely to continue for years to come. In all, there were 27 named storms, including 15 hurricanes of which seven were major (Category 3 or higher). Six hurricanes (Cindy, Dennis, Katrina, Ophelia, Rita, and Wilma) and two tropical storms (Arlene and Tammy) directly struck the United States. The preliminary FY 2005 actual for the GPRA measure: 48 Hour Hurricane Track Error is 99 nautical miles, which far exceeds the FY 2005 target of 128 nautical miles. NOAA scientists predicted that 2005 would be an extremely active hurricane season, forecasting near record activity when the hurricane season outlook was updated in early August.

### NOAA and the EPA Urge Americans to "Be Air Aware"

Air quality forecasts produced by NOAA and the Environmental Protection Agency (EPA) were enhanced and expanded to better serve more regions of the United States. Forecast information for ground-level ozone that has been available for the northeastern United States will now include areas from just east of the Rocky Mountains to the Atlantic and Gulf coasts. Hour-by-hour forecasts, through midnight the following day, are available online, providing information for the onset, severity, and duration of poor air quality to more than 180 million people. State and local air quality forecasters use this information as another tool in issuing next-day alerts for poor air quality to more than 300 communities.

# **Commerce & Transportation**

# NOAA Commerce and Transportation Programs Support Gulf Coast Hurricane Preparation, Response, Recovery and Planning

NOAA responded immediately to the destructive 2005 hurricanes by providing aerial imagery of the impacted coastline to help emergency responders assess the situation, sending its Scientific Support Coordinators to address nearly 400 hazardous material spills, and its Navigation Response Teams to survey for obstructions to navigation in critical ports and waterways to allow relief supplies to be delivered and maritime commerce to resume. Readings from the National Water Level Observation Network tide stations in the region helped forecasters make accurate storm surge predictions before hurricanes made landfall and provided emergency responders with real time storm tides. These NOAA capabilities continue to support the impacted areas with response to spills and maritime incidents. NOAA has also invested more than \$3.7 million in 2005 grant funding to Gulf States to build, and in some cases re-build, their infrastructure and capacity to determine and deliver consistent and timely height information. Accurate land and water level heights are critical to determining effective highway evacuation routes, levee heights, storm surge modeling, flood plain mapping, sea level rise calculations, vessel under-keel and bridge clearance, subsidence monitoring, and restoration of coastal habitats. NOAA released Technical Report 50 to describe methods and research results into recent rates of subsidence in the lower Mississippi Valley and northern Gulf Coast region. The data in this report were obtained from the analysis of leveling projects in NOAA's geodetic database observed between 1920 and 1995.

# NOAA's Aviation Weather Program Exceeded Aggressive Performance Criteria for Aviation Forecasts

The Aviation Weather Program is vital to aviation operations because as it improves capacity and safety to the National Airspace System (NAS). Today, weather accounts for 70% of all air traffic delays within the U.S. National Airspace System, the Federal Aviation Administration (FAA) indicates these delays cost the U.S. economy \$10B/year of which an estimated \$4B is avoidable, and on average, 200 general aviation pilots are killed every year in weather-related accidents across the U.S. With respect to ceiling and visibility forecasts, the False Alarm Rate decreased five percentage points compared to FY 2004. The program also fielded and tested 25 Water Vapor Sensors to increase critical observations used in forecasts, created and conducted a new training course for meteorologists and pilot weather modules utilized by over 10,000 individuals, and successfully demonstrated the Volcanic Ash Collaboration Tool in collaboration with the Federal Aviation Administration. The Volcanic Ash Collaboration Tool is an online discussion board that allows NOAA, FAA, and USGS to share volcanic ash data collected from different models, ensure that all information is accurate and consistent, and provide this information to pilots. The new collaboration tool ensures that warnings and forecasts for volcanic ash are timely, accurate, and consistent.

New **NOAA Physical** Oceanographic **Real-Time** System (PORTS®) The Columbia River is the 13th major United States waterway to install a new PORTS® designed to support safe, cost-efficient marine transportation by providing accurate realtime oceanographic and meteorological data. Managed by NOAA, the system is now operational and serving that maritime community in a variety of user friendly formats, including telephone voice response and the Internet. The Columbia River annually handles nearly 48 million tons of cargo. Vessel operators must know the depth of the water in order to maximize ship efficiency and minimize groundings and accidents. In port areas, water levels and currents frequently differ from predictions, as a result of changes in winds and water run off. PORTS® provides accurate real-time information needed to make marine transportation both safe and efficient. Users of NOAA PORTS® information include port authorities, vessel pilots, shipping companies, U.S. Coast Guard, U.S. Navy, recreational boaters, fishermen, coastal managers, environmental organizations, academia and surfers. **PORTS®** is available online http://tidesandcurrents.noaa.gov/d\_ports.html.

### **NOAA Makes Electronic Charts more Accessible via the Internet**

NOAA now offers both its raster nautical charts and vector Electronic Navigational Charts (ENC) for free download via its official website at <a href="http://nauticalcharts.noaa.gov">http://nauticalcharts.noaa.gov</a>. Following on the success of the ENC launch in 2003, NOAA placed its Raster Navigational Charts (RNC) on the Internet in late 2005. The files offered are georeferenced, full-color images of NOAA's paper nautical charts, published and updated by NOAA. Like the ENCs, the RNCs have become an important and successful contributor to safe and efficient marine transportation. The response to the "free on the Internet" policy is overwhelmingly positive. NOAA also offers an ENC-Direct-to-GIS capability to enable non-navigational users such as coastal zone managers and scientists to use NOAA chart data more easily in Geographic Information Systems. NOAA's research into improved products and delivery mechanisms is an ongoing effort to provide users with highly accurate information for safe navigation and other purposes. These activities support NOAA's goals to promote safe marine transportation and to balance economic and environmental interests in the marine environment.

# **Mission Support**

# NOAA Created its First-ever Corporate 20-Year Research Vision and 5-Year Research Plan in FY 2005

Documents to guide the long and short-term direction of NOAA's research enterprise were developed and widely distributed through an extensive stakeholder outreach campaign. The 20-Year Research Vision adopts a longer-term perspective of ecological challenges and the scientific advances that can be expected to help meet those challenges, while the 5-Year Research Plan includes milestones for NOAA's research that are aimed at improving NOAA's products and information services in the near term.

# NOAA Aircraft and Ships Collected Data that Supported Accurate Prediction of Hurricanes Katrina and Rita and Reopening of Ports after Hurricanes

NOAA's WP-3D Orion research and reconnaissance turbo-props and Gulfstream-IV high altitude surveillance jet flew several missions that provided some of the data that allowed accurate prediction of devastating hurricanes Katrina and Rita. NOAA ships THOMAS JEFFERSON and NANCY FOSTER were diverted from planned missions to areas impacted by the hurricanes and helped collect the data needed to reopen critical Gulf Coast ports and assess impact on Gulf fisheries.

# NOAA's Successful Satellite Launch Ensures Continuity and Improved Collection of Data

NOAA-N was successfully launched from Vandenberg Air Force Base, California on May 20, 2005. Upon achieving orbit NOAA-N became NOAA-18 and was declared operational on August 30, 2005 as the primary afternoon satellite in the Polar Operational Environmental Satellite (POES) constellation. NOAA-18 marks the beginning of the NOAA and the European Organization for the Exploitation of Meteorological Satellites (EUMETSAT) Initial Joint Polar System (IJPS) agreement. The IJPS project comprises two NOAA polar satellites (NOAA-18 and NOAA-N Prime) and two EUMETSAT satellites (Metop A and Metop B). This gives NOAA and EUMETSAT the ability to share satellite instrument data and products.

### **NOAA Successfully Implements Grants-on-Line**

NOAA implemented the Grants-on-Line program in 2005, enabling a 27% increase in workload from last year for a total of 1900 grants awarded. In addition, on the final day that grants could be entered into the system, only 41 grants remained, representing a 50 percent improvement over last year in the timeliness of grant processing. Close to 100 percent of grants are now applied for electronically using grants.gov.

### Significant Progress in Modernizing NOAA's Fleet of Ships

NOAA's first new world class fisheries survey vessel, OSCAR DYSON, was delivered, commissioned and began operations collecting data to manage fishery stocks and protect marine mammals from its home port of Kodiak, Alaska. NOAA also began construction on the FSV 2 (BIGELOW). In addition a contract was awarded and conversion begun on former Navy T-AGOS vessel CAPABLE, which will be NOAA's first ship devoted to ocean exploration. Through a national ship-naming contest, CAPABLE will be commissioned OKEANOS EXPLORER.

# NOAA Earns Unqualified Audit Opinion for 7<sup>th</sup> Straight Year

NOAA has been under the scrutiny of an external audit of our financial statements since 1994, and has received an "unqualified opinion" on its statements each year since 1998. An unqualified opinion is an independent auditor's opinion of our financial statements, given without any reservations. This opinion states that the auditor believes NOAA followed all accounting rules appropriately and that the financial reports are an accurate representation of the agency's financial management.

# Chapter 2

# FY 2005 Performance Results

# **NOAA GPRA Performance Results**

NOAA's mission goals in ecosystems, climate, weather & water, and commerce & transportation are matrixed, from a funding and organizational perspective, to maximize our support of Departmental performance goal to observe, protect, and manage the Earth's resources to promote environmental stewardship. NOAA currently has 29 Government Performance & Results Act (GPRA) measures. In FY 2005, NOAA performed well on its GPRA-mandated Performance Measures, almost achieving or exceeding 27 of 29 targets, improving on four of the 29 targets over 2004. NOAA achieved green status on 83% of the targets, a 10% improvement over last year. We expect even better performance on our GPRA measures this year. The funding requested in this Budget is essential to improving our scorecard results, and we are employing new and modified measures in FY 2006 and FY 2007 to better represent and assess NOAA's performance in achieving our mission.

NOAA GPRA successes include the number of habitat acres restored, reductions in the Nation's uncertainty in the magnitude of carbon uptake, and hurricane forecast track error. In addition, accomplishments also consist of reductions to the hydrographic survey backlog within navigationally significant areas, and a reduction to the number of major fish stocks with an "unknown" stock status [see Performance Summary, next page].

NOAA's GPRA goals are focused on the results of key programs and services, support decision-making and congressional oversight, and are designed to measure and improve the performance of NOAA in meeting its mission. GPRA is unique in its requirement that agency "results" be integrated into the budgetary decision-making process. NOAA is constantly striving to improve our measures – adding or modifying several measures for FY 2007 – for the betterment of our service to the American public.

For more information on NOAA's FY 2005 performance, please refer to the Department of Commerce FY 2005 Performance and Accountability Report (PAR), found here: <a href="http://www.osec.doc.gov/bmi/budget/FY05PAR.htm">http://www.osec.doc.gov/bmi/budget/FY05PAR.htm</a>.

# **NOAA** Performance Summary for FY 2005

Goal	GPRA Measure	FY 2005 Target	FY 2005 Actual	Goal Met
	Number of Overfished Major Stocks of Fish	40	42	
	Number of Major Stocks with an "Unknown" Stock Status	81	73	
Ecosystems	Percentage of Plans to Rebuild Overfished Major Stocks to Sustainable Levels	98%	96%	
Ecc	Number of Habitat Acres Restored (Annual/Cumulative)	4,500/ 21,083	8,333/ 24,916	
	Number of Commercial Fisheries Which Have Insignificant Marine Mammal Mortality	8	3	
	Increase in Number of Endangered Species with Reduced Risk of Extinction	7	5	
	Increase in Number of Threatened Species with Reduced Risk of Extinction	6	8	
	U.S. Seasonal Temperature Forecasts (cumulative skill score computed over the regions where predictions are made)	18	19	
Climate	Reduce the Uncertainty in the Magnitude of the North American (NA) Carbon Uptake	Reduce uncertainty to +/48 Gt. Carbon /Year	Reduced uncertainty to +/- 0.4 Gt. Carbon / Year	
CI	Assess and Model Carbon Sources Globally (Submit quality-controlled Atlantic Ocean carbon datasets from the CO2/CLIVAR hydrographic cruises to national data centers)	Submit datasets to national data centers	Datasets submitted	
	Determine the National Explained Variance (%) for Temperature and Precipitation for the Contiguous United States	Temp: 96.7% Precip: 90%	Temp: 96.9% Precip: 91.4%	
	New Climate Observations Introduced	1,014	1,133	

	<b>Key to Color Coding:</b>	
Met	Slightly Below Target	Not Met

# **NOAA** Performance Summary for FY 2005

Goal	GPRA Measure	FY 2005 Target	FY 2005 Actual	Goal Met
		Lead: 13	13	
ater	Lead Time (Minutes), Accuracy (%), and False Alarm Rate (FAR) (%) for Severe Weather Warnings Tornadoes	Acc: 73%	75%	
		FAR: 73%	77%	
Weather & Water	Lead Time (Min) and Accuracy (%) for Severe Weather	Lead: 48	54	
athe	Warnings for Flash Floods	Acc: 89%	88%	
M	Hurricane Forecast Track Error, 48 Hour (Nautical Miles)		99	
	Accuracy (%) (Threat Score) of Day 1 Precipitation Forecasts	27	29	
	Lead Time (Hours) and Accuracy (%) for Winter Storm	Lead: 15	17	
	Warnings	Acc: 90%	91%	
	Cumulative Percentage of U.S. Shoreline and Inland Areas that Have Improved Ability to Reduce Coastal Hazard Impacts	28%	28%	
tion	Percentage of National Spatial Reference System Completed (cumulative %)	89%	89.7%	
sporta	Reduce the Hydrographic Survey Backlog Within Navigationally Significant Areas (square nautical miles surveyed per year)	2,700	3,079	
Commerce & Transportation	Accuracy (%) and False Alarm Rate (FAR) (%) of Forecasts of	Acc: 46%	46%	
	Ceiling and Visibility (3miles/1000 ft.) in Aviation Forecasts	FAR: 68%	63%	
mmer	Accuracy (%) of Forecast for Wind Speed and Wave Height in	Winds: 57%	57%	
ວິ	Marine Forecasts	Waves: 67%	67%	

Met	Key to Color Coding:  Slightly Below Target	Not Met

# Chapter 3

# NOAA Line Office Summary Table

# LINE OFFICE SUMMARY (\$ in Thousands)

	EX2005	EW 2006	ET/ 2006	EN 2007	EN 2007	EV 2007	EV 2007
TWO TIPLOPOSED OPERATING BLAN	FY2005	FY 2006	FY 2006	FY 2007	FY 2007	FY 2007	FY 2007
FY 07 PROPOSED OPERATING PLAN	Enacted	Enacted	Terminations	Total	Base	Program	Pres. Bud
	"Currently			ATBs		Changes	Request
	Available BA''						
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
National Ocean Service							
ORF	542,034	493,151	135,385	416	358,182	36,273	394,455
PAC	126,261	91,311	86,380	(58)	4,873	7,800	12,673
OTHER	16	6,000	0	0	6,000	0	6,000
TOTAL, NOS	668,311	590,462	221,765	358	369,055	44,073	413,128
National Marine Fisheries Service							
ORF	676,515	667,226	103,859	4,557	567,924	81,064	648,988
PAC	31,048	30,444	30,444	0	0	01,004	0
OTHER	115,487	106,150	8,571	(10,107)	87,913	0	87,913
TOTAL, NMFS	823,050	803,820	142,874	(5,550)	655,837	81,064	736,901
Oceanic and Atmospheric Research	404 106	370,241	75 417	6 202	201.027	27.246	229 272
ORF PAC	404,106 9,663	9,369	75,417 0	6,203 26	301,027 9,395	37,246 984	338,273 10,379
OTHER	9,003	9,309	0	0	9,393	0	0,379
TOTAL, OAR	413,769	379,610	75,417	6,229	310,422	38,230	348,652
National Weather Service	702.026	746.044	25 507	24.754	746,001	27.445	702 446
ORF PAC	703,926 79,055	746,844 101,400	25,597 13,273	24,754 4,228	746,001 92,355	37,445 6,065	783,446 98,420
OTHER	79,033	101,400	13,273	4,228	92,333	0,003	98,420
TOTAL, NWS	782,981	848,244	38,870	28,982	838,356	43,510	881,866
NESDIS	15.000	155 505	25.210	2.055	111.501	4005	1.40.550
ORF PAC	176,060 731,388	177,737 774,483	35,218 4,332	2,075 1,697	144,594 771,848	4,985	149,579 884,304
OTHER	751,566	774,463	4,332	1,697	0	112,456 0	004,304
TOTAL, NESDIS	907,448	952,220	39,550	3,772	916,442	117,441	1,033,883
•			·	·	·	·	
Program Support/Corporate Services							
ORF (Includes PS/NMAO Labor Adjustment)	171,532	176,574	0	1,606	178,180	13,746	191,926
PAC	986	17,730	12,821	(4,909)	0	0	0
OTHER SUB-TOTAL, PS/Corporate Services	0 172,518	194,304	12,821	(3,303)	178,180	13,746	191,926
SUB-TOTAL, 15/Corporate Services	172,516	194,504	12,621	(3,303)	170,100	13,740	191,920
Program Support/NOAA Educ Prog							
ORF	18,275	37,514	22,313	11	15,212	4,100	19,312
PAC	0	0	0	0	0	0	0
OTHER SUB-TOTAL, PS/NOAA Educa Prog	18,275	37,514	22,313	0 11	0 15,212	4,100	19,312
SUB-TOTAL, TS/NOAA Educa Flog	10,273	37,314	22,313	11	13,212	4,100	19,312
Program Support/Facilities							
ORF	33,281	10,849	0	1,078	11,927	11,082	23,009
PAC	0	19,725	19,725	0	0	0	0
OTHER	0	0	0	0	0	0	0
SUB-TOTAL, PS/Facilities	33,281	30,574	19,725	1,078	11,927	11,082	23,009
Program Support/Corp Srv, Edu, Fac							
ORF	223,088	224,937	22,313	2,695	205,319	28,928	234,247
PAC	986	37,455	32,546	(4,909)	0	0	0
OTHER	0	0	0	0	0	0	0
TOTAL, PS/Corp Srv, Edu, Fac	224,074	262,392	54,859	(2,214)	205,319	28,928	234,247
Program Support/OMAO							
ORF	144,549	133,341	14,286	3,840	122,895	6,960	129,855
PAC	62,932	75,082	39,844	304	35,542	(14,851)	20,691
OTHER	17,574	20,149	0	1,185	21,334	0	21,334
TOTAL, PS/OMAO	225,055	228,572	54,130	5,329	179,771	(7,891)	171,880
	1						

FY 07 PROPOSED OPERATING PLAN	FY2005 Enacted "Currently Available BA"	FY 2006 Enacted	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base	FY 2007 Program Changes	FY 2007 Pres. Bud Request
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
Total PS ORF (Includes PS/NMAO Labor Adjustment)	367,637	358,278	36,599	6,535	328,214	35,888	364,102
Total PS PAC	63,918	112,537	72,390	(4,605)	35,542	(14,851)	20,691
Total PS Other	17,574	20,149	0	1,185	21,334	0	21,334
TOTAL, PS	449,129	490,964	108,989	3,115	385,090	21,037	406,127
					·		·
ALL OBLIGATIONS							
ORF	2,870,278	2,813,477	412,075	44,540	2,445,942	232,901	2,678,843
PAC OTHER	1,041,333 133,077	1,119,544 132,299	206,819 8,571	1,288 (8,922)	914,013 115,247	112,454	1,026,467 115,247
TOTAL, ALL OBLIGATIONS	4,044,688	4,065,320	627,465	36,906	3,475,202	345,355	3,820,557
To me, mee oberoniiono	1,011,000	1,005,520	027,103	30,700	3,170,202	3 10,555	3,020,007
Subtotal, PAC Adjustments	0	(13,371)	0	0	(2,000)	0	(2,000)
Subtotal, PAC Transfer	1,043	1,147	0	0	0	0	0
Subtotal, ORF Adjustments	2,215	(11,629)	0	(6,000)	(11,000)	0	(11,000)
Subtotal, ORF Transfers	(82,779)	(69,242)	0	(10,000)	(80,000)	0	(80,000)
Subtotal, OTHER Discretionary	(157)	(58 828)	0 (6.316)	0 8 743	(441)	0	(441)
Subtotal, OTHER Mandatory Subtotal, OTHER Adjustments	(40,042) (6,280)	(58,828) (1,906)	(6,316)	8,743	(43,769) 359	0	(43,769) 800
Subtotal, OTHER Aujustinellis	(0,280)	(1,900)			339	U	800
TOTAL, ALL APPROPRIATIONS	3,918,688	3,911,491	621,149	29,649	3,338,351	345,355	3,684,147
FY 2006 Strategic Plan - ORF							
MISSION SUPPORT	476,217	461,606	40,256	7,946	429,296	33,925	463,221
CLIMATE	250,468	241,746	35,999	(6,782)	198,965	24,128	223,093
ECOSYSTEMS	1,181,010	1,104,470	203,214	(6,847)	894,409	105,259	999,668
COMMERCE & TRANSPORTATION	175,027	182,236	38,138	7,107	151,205	19,486	170,691
WEATHER & WATER	787,556	823,419	94,468	43,116	772,067	50,103	822,170
	2,870,278	2,813,477	412,075	44,540	2,445,942	232,901	2,678,843
FY 2006 Strategic Plan - PAC							
MISSION SUPPORT	860,710	938,795	118,680	(3,867)	816,248	114,130	930,378
CLIMATE	6,448	8,876	2,335	430	6,971	0	6,971
ECOSYSTEMS	80,824	62,711	57,780	(58)	4,873	2,305	7,178
COMMERCE & TRANSPORTATION	0 02 271	100.162	0	0	97.921	(2.001)	01.040
WEATHER & WATER	93,351 1,041,333	109,162 1,119,544	28,024 206,819	4,783 1,288	85,921 914,013	(3,981) 112,454	81,940 1,026,467
	1,041,555	1,117,544	200,017	1,200	714,013	112,454	1,020,407
FY 2006 Strategic Plan - Other Discretionary							
MISSION SUPPORT	0	0	0	0	0	0	0
CLIMATE	0 00 075	0	0	0 (170)	0	0	0
ECOSYSTEMS COMMERCE & TRANSPORTATION	90,075	70,471	2,255	(179) 0	68,478 0	0	68,478
WEATHER & WATER	0	0	0	0	0	0	0
WEATHER & WATER	90,075	70,471	2,255	(179)	68,478	0	68,478
	20,0.0		2,255	(2.2)	00,170	0	00,170
FY 2006 Strategic Plan - Other Mandatory	18.584	18,504		010	10 222		10.222
MISSION SUPPORT CLIMATE	17,574 0	18,504	0	818	19,322	0	19,322
ECOSYSTEMS ECOSYSTEMS	25,428	40,324	6,316	(9,561)	24,447	0	24,447
COMMERCE & TRANSPORTATION	25,428	40,324	0,310	(9,561)	0	0	24,447
WEATHER & WATER	0	0	0	0	0	0	0
WEITHERWWITER	43,002	58,828	6,316	(8,743)	43,769	0	43,769
FY 2006 Strat Plan - TOTAL DIRECT OBLIGATION	S NOA A						
MISSION SUPPORT	1,354,501	1,418,905	158,936	4,897	1,264,866	148,055	1,412,921
CLIMATE	256,916	250,622	38,334	(6,352)	205,936	24,128	230,064
ECOSYSTEMS	1,377,337	1,277,976	269,565	(16,645)	992,207	107,564	1,099,771
COMMERCE & TRANSPORTATION	175,027	182,236	38,138	7,107	151,205	19,486	170,691
WEATHER & WATER	880,907	932,581	122,492	47,899	857,988	46,122	904,110
	4,044,688	4,062,320	627,465	36,906	3,475,202	345,355	3,820,557
FY 2006 Strat Plan - TOTAL APPROPRIATIONS NO	AA						
MISSION SUPPORT	1,336,927	1,400,401	158,936	4,079	1,245,544	148,055	1,393,599
CLIMATE	256,916	250,622	38,334	(6,352)	205,936	24,128	230,064
ECOSYSTEMS	1,351,909	1,237,652	263,249	(7,084)	967,760	107,564	1,075,324
COMMERCE & TRANSPORTATION	175,027	182,236	38,138	7,107	151,205	19,486	170,691
WEATHER & WATER	880,907	932,581	122,492	47,899	857,988	46,122	904,110

FY 07 PROPOSED OPERATING PLAN	FY2005 Enacted "Currently Available BA"	FY 2006 Enacted	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base	FY 2007 Program Changes	FY 2007 Pres. Bud Request
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
	4,044,688	4,062,320	627,465	36,906	3,475,202	345,355	3,820,557
FY 2006 Strat Plan - TOTAL APPROPRIATIONS NOA MISSION SUPPORT	1,336,927	1,400,401	158,936	4,079	1,245,544	148,055	1,393,599
CLIMATE	256,916	250,622	38,334	(6,352)	, ,	24,128	230,064
ECOSYSTEMS	1,351,909	1,237,652	263,249	(7,084)	,	,	1,075,324
COMMERCE & TRANSPORTATION	175,027	182,236	38,138	7,107	151,205	19,486	170,691
WEATHER & WATER	880,907	932,581	122,492	47,899	857,988	46,122	904,110
Direct Obligations	4,001,686	4,003,492	621,149	45,649	3,428,433	345,355	3,773,788
Financing:	(85,958)	(95,001)	0	(16,000)	(93,082)	0	(92,641)
Appropriations	3,918,688	3,911,491	621,149	29,649	3,338,351	345,355	3,684,147

# Chapter 4

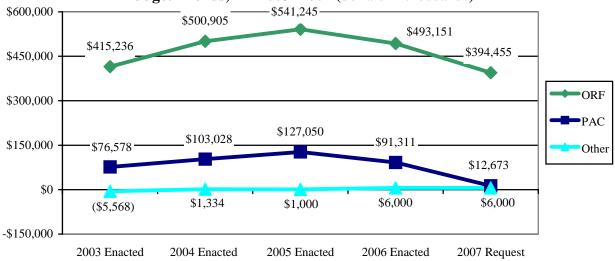
# NOAA Operations, Research and Facilities



# **National Ocean Service**

(Dollars in Thousands)	FY 2006 Enacted	FY 2007 Base	Program Changes	Total Request			
National Ocean Service Operations, Research and Facilities (ORF)							
Navigation Services	\$149,218	\$120,205	\$19,902	\$140,107			
Ocean Resources Conservation and Assessment	210,885	114,776	11,669	126,445			
Ocean and Coastal Management	133,048	123,201	4,702	127,903			
Total, National Ocean Service - ORF	493,151	358,182	36,273	394,455			
Other National Ocean Service Accounts							
Total, National Ocean Service - PAC	91,311	4,873	7,800	12,673			
Total, National Ocean Service - Other	6,000	6,000	0	6,000			
GRAND TOTAL NATIONAL OCEAN SERVICE (Direct Obligations)	\$590,462	\$369,055	\$44,073	\$413,128			
Total FTE	1,235	1,237	6	1,243			

## **Budget Trends, FY 2003- 2007** (dollars in thousands)



ORF: Operations, Research & Facilities

PAC: Procurement, Acquisition & Construction

Other: Environmental Improvement and Restoration Fund; Coastal Impact Assistance Fund; Coastal Zone Management Fund; and Damage Assessment and Restoration Revolving Fund

www.nos.noaa.gov

# **National Ocean Service**



The National Ocean Service works to preserve America's coastal and ocean resources through scientific research, navigation services, habitat restoration, and protection of marine ecosystems.

NOAA's National Ocean Service (NOS) is the primary Federal agency working to preserve America's coastal resources. NOS provides observation, measurement, assessment, and management of the Nation's coastal and ocean areas, delivers critical navigation products and services, and conducts response and restoration activities. NOS balances environmental protection with economic development by providing the scientific, technical, and management expertise necessary to address the complex challenges of our coastal regions, including the Great Lakes.

An estimated 154 million people lived in coastal counties in 2004. The population in these coastal areas is expected to increase to about 165 million by the year 2015. This increasing density, coupled with the fast-growing economy of coastal areas, makes the task of managing coastal resources increasingly difficult. Growth in coastal areas creates jobs, generates economic prosperity, adds new industries, enhances educational opportunities, and increases tax revenues. However, it also burdens local environments, threatening the very resources that draw people to the coast.

As a national leader for coastal stewardship, NOS promotes a wide range of research activities to create the strong science foundation required to advance the sustainable use of our precious coastal systems. NOS contributes significantly to achieving two of NOAA's four Strategic Plan Mission Goals: (1) support the Nation's commerce with information for safe, efficient, and environmentally sound transportation, and (2) protect, restore, and manage the use of coastal and ocean resources through ecosystem-based management. While these two goals capture much of the National Ocean Service's activities, NOS also supports and makes important contributions to NOAA's other two

mission goals: understand climate variability and change to enhance society's ability to plan, respond, and serve society's needs for weather and water information.

NOS provides improvements in the quality, quantity, geographic distribution, and timeliness of ocean and coastal observations. These observations are critical components of the Nation's Integrated Ocean Observing System (IOOS), as well as fundamental contributors to the Global Earth Observation System of Systems (GEOSS). NOS mapping, charting, geodetic, and oceanographic activities build on the marine and coastal observations collected to increase the efficiency and safety of marine commerce and support coastal resource management. NOS protects and restores coastal resources injured by releases of oil and other hazardous materials. NOS also manages marine sanctuaries and, in partnership with the coastal states, helps manage the Nation's valuable coastal zones and nationally significant estuarine reserves. Understanding of the coastal environment is enhanced through coastal ocean activities, which support science and resource management programs. NOS also helps federal, state, local, and international managers build the suite of skills needed to protect, restore, and use coastal ecosystems by providing technical assistance, process and technical skill training, and other capacity building activities.

#### FY 2007 Budget Summary

NOAA requests a total of \$394,455,000 and 1,227 FTE to support the continued and enhanced operations of the National Ocean Service. The total includes \$416,000 for Adjustments to Base, \$36,273,000 for Program Increases, and \$135,385,000 in Terminations.

#### **ADJUSTMENTS TO BASE:**

NOAA requests a net increase of \$416,000 and 2 FTE to fund adjustments to base across all accounts in the National Ocean Service activities. With this increases program totals will fund the estimated FY 2007 Federal pay raise of 2.2 percent and annualize the FY 2006 pay raise of 3.1 percent. Program totals will provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration.

In addition, NOAA proposes to elevate three important NOS staff offices to program office status – the National Marine Sanctuary Program, the Center for Operational Oceanographic Products and Services, and the Coastal Services Center. The size of theses offices and the importance of their missions require their elevation to program office level. This realignment will improve NOAA's effectiveness in meeting its ocean and coastal responsibilities and bring NOS programs closer to its customers and endusers. In accordance with the goals of the President's Management Agenda, this

realignment enables the organization to further improve front-line service delivery. This proposal does not require any additional funds or FTE to be implemented.

#### NOS – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2007:

NOAA requests a net increase of \$36,273,000 and 6 FTE over the FY 2007 base for a total request of \$394,455,000 and 1,227 FTE. These changes are summarized at the subactivity level below and to be concise, do not include descriptions below \$1,000,000. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits*. More detailed descriptions are located in the NOAA FY 2007 Technical Budget.

#### **Navigation Services**

\$140,107,000

A net increase of \$19,902,000 and 5 FTE above the base is requested in the Navigation Services subactivity, for a total of \$140,107,000 and 613 FTE. The FY 2007 President's Budget requests funding for a suite of navigation products and services that help ensure the safety of marine transportation, while improving the economic efficiency and competitiveness of American commerce.



Maritime commerce in the busy Port of Long Beach moves safely and efficiently thanks to a suite of NOAA navigation products and services, including Electronic Navigational Charts, real-time physical oceanographic data, and precise positioning. The value of cargo passing through the port was estimated at \$92 billion in 2004.

• **Mapping and Charting:** \$17,487,000 and 5 FTE in net increases above the base, for a total of \$90,867,000 and 323 FTE, are requested under the Mapping and Charting line item of the Navigation Services subactivity.

NOAA requests an increase of \$1,000,000 and 1 FTE to develop and operationalize data collection and processing improvements hydrographic and shoreline data. Hydrographic and shoreline data are the most critical and time-sensitive elements of a nautical chart. Due to recent advancements in technology, the trend toward higher resolution datasets, and congressional support for increased data acquisition, NOAA is facing a situation wherein processing and application to charting products has become a bottleneck to making this safety data available to the public and commercial users. To help solve this problem, NOAA will procure and deploy 3 portable GPS-enabled buoys to be used with survey vessels to improve the collection of hydrographic data. This effort will reduce the time required to process hydrographic survey data by up to 10 days per survey — a 5% improvement over current delivery times.

NOAA will also invest in data management research and technology development to improve the speed and accuracy of data acquisition, and accelerate the delivery of navigation information to the maritime community for safe, efficient, and environmentally sound marine transportation. NOAA will begin to implement its research in new technologies and delivery mechanisms, such as geographic information systems (GIS) and web-based interactive programs. NOAA also will improve shoreline data updates by procuring commercial satellite shoreline imagery for change analysis. Satellite imagery is a valuable tool for identifying significant shoreline changes and where new data collection is needed.

NOAA requests an increase of \$2,000,000 and 2 FTE to implement the National Vertical Datum Transformation Tool database, or VDatum. This tool enables any user — federal/state/local/individual — to integrate bathymetric and topographic coastal data from different sources and different reference datums. This means that geospatial datasets can be shared more readily, resulting in data that can serve more than one purpose, and thereby save time, money and effort by reducing redundant data collection. VDatum will also allow NOAA to acquire hydrographic and shoreline data more efficiently, thus improving NOAA's delivery of products and services for navigation safety.

The requested increase will enable NOAA to transition VDatum from successful demonstration projects in areas such as Tampa Bay, Delaware Bay, and South East Louisiana to a national scale. Airborne, land, and marine platforms will be able to exploit GPS technology for vertical location, fuse GPS height with other remote sensing technologies, and map the national coastline both above and below water with greater ease and accuracy. The tool will also improve the efficiency and accuracy of hydrographic surveys for nautical charts by eliminating the need for time-consuming water level corrections and post-processing. VDatum models have multiple uses in addition to mapping. For example, the topping of the New Orleans levees in Hurricane Katrina highlights the need for VDatum to help establish accurate heights for rebuilding the levees in order to

adequately protect against a Category 3 or greater storm surge. VDatum models developed for Puget Sound are also now being used to improve inundation estimates from tsunamis.

• NOAA requests an increase of \$1,810,000 and 2 FTE to implement eight regional Navigation Response Teams (NRTs). The requested increase will allow NOAA to fully staff, train, and implement NRTs 5, 6, and 7, and begin building NRT 8 in FY 2007. These funds will provide contract support and FTE for full staffing, as well as funding for NRT launch maintenance and routine equipment replacement in the outyears. Eight regional NRTs will fulfill the requirement for an adequate distributed capacity to respond within 24 hours to incidents in all ports in the contiguous U.S.



NRT 4 staged for Hurricane Rita response

NRTs support critical Electronic Navigational Charts (ENC) field verification, emergency response activities associated with natural and man-made disasters, support to National Homeland Security activities, and Marine Transportation System constituent requirements. These teams have proven their worth time and again for rapid response surveys of U.S. ports and waterways to keep ports open and commerce moving after hurricanes and maritime accidents. NRT contributions during the response and recovery efforts following the devastating hurricanes Katrina, Rita and Wilma were widely acknowledged by maritime community stakeholders such as the American Association of Port Authorities and the U.S. Coast Guard.

The six existing teams are distributed along the Northeast and Southeast Atlantic, the West Coast and Puget Sound, the Great Lakes, and the eastern Gulf of Mexico. NRT 7 is slated to fill the mid-Atlantic gap. Ports in this area contribute significantly to the economy of the Nation and to homeland security; the largest Navy base in the world is located in Hampton Roads, Virginia. NRT 8 will operate in the central and western Gulf. The charting requirements of the western Gulf have not been addressed by NOAA field units in years. This area is part of the petroleum and chemical products corridor of the country. Spills or other interruptions to cargo movement in this area will significantly impact the Nation's environment and economy. The additional NRTs are also essential to support rotations in and out of a stricken area. As NOAA learned with Hurricane Katrina, the duration of the response required that staff rotate in and out to avoid exhaustion and health issues stemming from 18-hour days in rough conditions.

- NOAA requests an increase of \$1,890,000, for a total of \$6,128,000, for Electronic Navigational Charts (ENCs) to continue the planned incremental investment in the effort to provide full contiguous ENC coverage of U.S. waters. This increase will allow NOAA to add 70 ENCs in FY 2007, for a total of 620 built and maintained. At the requested funding level, NOAA should achieve complete Electronic Navigational Chart coverage for the Nation by the end of FY 2010. This funding level will allow NOAA to keep the full chart suite under continuous cartographic maintenance. Mariners need the right tools to navigate safely, now more than ever, given the rapid increase in vessel size and use of the U.S. Marine Transportation System (MTS). As the Nation's dependence on the MTS grows, better navigation information is critical to protecting lives, cargo and the environment. It is crucial for mariners to know where and when changes occur in the nation's ports, harbors, waterways, and offshore waters to help prevent accidents and groundings. Reducing these risks would, in part, be achieved by improving the navigation information that NOAA provides to the Nation.
- NOAA requests an increase of \$10,487,000, for a total of \$31,173,000, for contract hydrographic survey activities. This increase will allow NOAA to collect approximately 500 additional square nautical miles of hydrographic survey data in FY 2007, and to maintain its planned FY 2007 survey schedule to collect and process approximately 3000 square nautical miles of hydrographic data. The request will fund turnkey contracts for data acquisition, and replaces funding for a vessel time charter. Turnkey contracts have proven to be a more effective and efficient mechanism for NOAA to complement its in-house capacity to collect hydrographic data.

NOAA is responsible for surveying and charting U.S. and territorial waters to the limits of the Exclusive Economic Zone (EEZ), an area of about 3.4 million square nautical miles. NOAA has evaluated the EEZ to determine which areas are

navigationally significant, and of these, which are the top priority for surveying. NOAA has focused primarily on surveying in the highest priority areas, many of which carry heavy commercial traffic, are less than 30 meters deep, and change constantly.

- **Tide and Current Data:** \$2,715,000 in net increases above the base, for a total of \$24,970,000 and 107 FTE, are requested under the Tide and Current Data line item of the Navigation Services subactivity.
  - Program to rebuild and strengthen the National Water Level Observation Network's (NWLON) ability to provide critical navigation and storm tide information throughout extreme weather and water events. Hurricanes Katrina, Rita and Wilma destroyed a total of nine tide gauges in the Gulf and southern Florida and inflicted serious damage across the rest of the region's NWLON. The funds will re-establish destroyed stations and make other needed

system wide repairs. In addition to filling observation gaps, the funds will significantly improve NWLON's ability the continue operation and provide critical real time data for storm surge forecasts and emergency response throughout a storm's duration by "hardening" stations. Hardening a station involves elevating and strengthening the underlying support platform so that extreme water levels do not destroy the station or exceed sensor heights. The only two



NOAA's "hardened" NWLON station in Dauphin Island, AL withstood the forces of hurricane Katrina, while the pier it was attached to was destroyed

(out of thirty two) existing hardened NWLON stations in the Gulf (Dauphin Island, Alabama and Grand Isle, Louisiana) successfully operated and provided critical data through both Katrina and Rita despite being outer coast stations exposed directly to the brunt of wind and wave action.

NOAA requests an increase of \$715,000 to maintain and continue expanding the cost-shared PORTS® program. The increase will enable NOAA to maintain the existing thirteen PORTS® as well as to continue expanding the system for the next several years. A number of ports important to the transport of vital energy supplies to the Nation, such as New Orleans, Louisiana, Port Arthur, Texas and Cherry Point, Washington have expressed strong interest in establishing PORTS® but cannot be accommodated with current funding.



NOAA's air gap sensors allow large ships to pass safely under bridges

Access to accurate real-time water level data allows U.S. port authorities and maritime shippers to make sound decisions regarding vessel safety, maximize tonnage (based on available bottom clearance), and limit passage times, without compromising safety. The thirteen PORTS® provide access to real time data to 39 of the Nation's top 150 seaports; these 150 ports transit over 99% of the Nation's cargo (by tonnage) on an annual basis.

#### **Ocean Resources Conservation and Assessment**

\$126,445,000

A net increase of \$11,669,000 above the base is requested in the Ocean Resources Conservation and Assessment subactivity, for a total of \$126,445,000 and 418 FTE.

- Ocean Assessment Program: \$2,615,000 in net increases above the base, for a total of \$54,677,000 and 65 FTE, are requested under the Ocean Assessment Program line item of the Ocean Resources Conservation and Assessment subactivity.
  - NOAA requests an increase of \$1,653,000, for a total of \$2,874,000, to support regional expansion of NOAA's Coastal Storms Program, and to maintain and advance previous investments in the Southern California Bight. Seventy-one percent (\$7 billion) of annual U.S. disaster losses occur in coastal areas because of dense populations living in the paths of strong storms. As demonstrated by the devastating impacts of Hurricanes Katrina and Rita in 2005, coastal communities need improved, robust products and services to help them plan for, respond to, and recover from coastal storms. Faced with increasing

vulnerability of coastal communities, coastal and emergency managers have expressed a need for comprehensive, timely and accessible information to aid in making decisions at critical times. NOAA's Coastal Storms Program meets this need by reaching out across NOAA's organizational lines to provide a suite of products that help coastal communities increase their resilience to coastal storms. Specific products include integrated oceanographic and meteorological observations, forecast models, on-line decision support tools, and regionally based outreach and training. These products are developed in close coordination with regional partners and, in many cases, in collaboration with them. As a result, regional needs are met and NOAA resources are significantly leveraged with resources from federal, state, and local partners.

With the requested funds, NOAA will begin initial efforts to expand the program into the Northern Gulf of Mexico by identifying regional needs and potential partners. Product development for the Southern California Bight, begun in FY 2005, will continue with projects such as an online, Geographic Information System-based tool to help emergency and coastal managers identify key hazards for the region and tools available to address them (e.g., hazard mitigation planning); a seamless topographic-bathymetric database that will greatly enhance understanding of erosion and inundation due to storm surge and tsunamis; and an assessment of the ecological impacts of storm-water driven non-point source pollution in the region.

NOAA requests an increase of \$962,000, for a total of \$25,702,000, to improve the condition of coral reefs. The requested increase will be used to augment state and territory grants for implementation of Local Action Strategy (LAS) priority projects. In addition, the increase will allow for targeted training and technical assistance to meet LAS-associated needs.

In order to translate broad national goals into on-the-ground action, the U.S. Coral Reef Task Force (USCRTF) initiated the LAS process to develop local conservation initiatives with measurable results in each of the seven U.S. states and territories with coral reefs. The strategies are locally driven roadmaps for collaborative and cooperative action among federal, state or territory and nongovernmental partners to address specific threats to coral reef ecosystems. Each LAS includes a range of projects designed to meet particular objectives for managing these threats. The goals and objectives of the LAS are linked to those found in the U.S. National Action Plan to Conserve Coral Reefs, which was produced and adopted by the USCRTF in 2000. The following six focus areas were identified and prioritized by the USCRTF for local action: fisheries management and over-fishing, land-based sources of pollution, recreational overuse, lack of public awareness, climate change and coral bleaching, and disease. Additional focus areas were included by some jurisdictions to address key local threats to coral health, including invasive species in Hawaii and population pressure in American Samoa. Using the six priority USCRTF focus areas as a guide,



Local Action Strategies developed for Guam target fisheries management, lack of public awareness, and recreational misuse and overuse

Florida, Hawaii, Guam, U.S. Virgin Islands, American Samoa, Puerto Rico, and the Commonwealth of the Northern Mariana Islands led development of specific LAS for each of the locally relevant threats. Applying a collaborative decision-making process based on local needs, concerns, and capacities, each jurisdiction worked with a variety of partners to create strategies containing projects designed to address a particular issue. Implementing LAS projects will significantly reduce specific threats to valuable U.S. coral reefs in each jurisdiction. The requested funding will leverage non-NOAA resources for additional on-the-ground action.

- **Response and Restoration:** \$3,094,000 in net increases above the base, for a total of \$24,736,000 and 112 FTE, are requested under the Response and Restoration line item of the Ocean Resources Conservation and Assessment subactivity.
  - NOAA requests an increase of \$2,794,000, for a total of \$16,321,000, to strengthen the agency's ability to respond to oil and chemical spills and terror incidents; determine damage to natural resources from contaminant releases; protect and restore marine and coastal ecosystems at hazardous waste sites; and work with communities to address critical local and regional

coastal challenges. This increase will restore NOAA's and restoration response capacity. NOAA responds to approximately 100 significant oil or chemical spills each year as scientific advisors to the U.S. Coast Guard. and provides solutions to cleanup agencies that protect and restore coastal resources at more than hazardous waste sites each year along the Nation's ocean and Great Lakes coasts. When oil or hazardous substances threaten or injure coastal and marine resources. NOAA and other state



NOAA pilots and a member of the Louisiana Department of Environmental Quality return to command post after overflights of Mississippi Delta following Hurricane Katrina.

and federal natural resource trustees are responsible for ensuring that cleanup actions protect those resources from further injury; for assessing and recovering natural resource damages to restore the injured resources; and for seeking compensation on behalf of the public for the loss of services that the natural resources provided.

This increase will allow NOAA to rebuild capacity for damage assessment, coastal protection, and hazardous materials response activities. With the requested increase, NOAA will: (1) better protect and restore NOAA trust resources at hazardous waste sites by providing technical assistance and solutions



NOAA Scientific Support Coordinator on over flight mission over Baton Rouge following Hurricane Katrina

that protect and enhance recovery of coastal resources, their supporting habitats, and human health; (2) increase the number of damage assessments of coastal and marine habitats impacted from releases of oil or other hazardous materials; (3) develop tools and training for coastal managers and spill responders to improve the Nation's ability to prepare for and respond to releases of oil, chemicals, and contaminants, and to restore degraded coastal resources; and (4) increase NOAA's capacity to respond to oil and chemical releases. NOAA provides scientific

support to other federal agencies and community-level responders for oil and chemical spills and other hazards threatening coastal environments and communities.

- National Centers for Coastal Ocean Science: \$5,960,000 in net increases above the base, for a total of \$47,032,000 and 241 FTE, are requested under the National Centers for Coastal Ocean Science line item of the Ocean Resources Conservation and Assessment subactivity.
  - NOAA requests an increase of \$5,960,000 for a total of \$15,801,000, for Extramural Research grants to support efforts to fulfill requirements of the recently reauthorized Harmful Algal Bloom Research and Control Act (HABHRCA). The requested funds will help to maintain NOAA's large and longstanding regional research investments to develop harmful algal bloom and hypoxia forecasting and response capabilities. These efforts are largely supported

through NOAA's competitive and extramural HAB and hypoxia research programs. These programs have a proven track record of developing the understanding and tools necessary for managers to respond and predict HAB and hypoxia events, such as those affecting the New England and Florida coasts this year.

HAB and hypoxic events (i.e., severe oxygen depletion) are some of the most complex phenomena currently challenging management of aquatic and marine ecosystems. Virtually every coastal state has reported recurring blooms, and a recent national assessment revealed that over half of our Nation's estuaries experience hypoxic conditions. Impacts have included the devastation of critical coastal habitats, loss of economically and culturally vital shellfish resources, illness and death in populations of protected marine species, and serious threats to human health posed by algal toxins.

Just one harmful algal bloom event can cost tens of millions of dollars to local coastal economies and the total costs associated with HABs over the past few decades have been conservatively estimated at over \$1 billion.



"Red tides" occur almost every summer along portions of Florida's Gulf coast

The additional funds requested will (1) help to maintain and strengthen the suite of NOAA competitive, peer-reviewed programs focused on HAB and hypoxia research, such as Ecology and Oceanography of Harmful Algal Blooms and Monitoring and Event Response for Harmful Algal Blooms; (2) accelerate the development and operationalization of tools and forecasts for the prediction, control, and mitigation of HABs and hypoxia; and (3) facilitate the assessment of and response to HAB and hypoxia events.

A net increase of \$4,702,000 and 1 FTE above the base is requested in the Ocean and Coastal Management subactivity, for a total of \$127,903,000 and 196 FTE.

- Coastal Management: A net program increase of \$4,702,000 and 1 FTE above the base, for a total of \$92,685,000 and 56 FTE, is requested under the Coastal Management line item of the Ocean and Coastal Management subactivity.
  - NOAA requests an increase of \$2,849,000, for a total of \$66,146,000, for Coastal Zone Management Grants to address increasing pressures on coastal areas and resources within these areas, including the need to enhance state and local capacity to address these pressures. These funds will support state participation in implementing key actions of the U.S. Ocean Action Plan. In particular, the increase will enable states to improve regional collaboration and planning, and address such critical coastal issues as ensuring that coastal communities reduce vulnerability to the impacts of coastal hazards and improving management of coastal watersheds. Finally, the funds will assist states in implementing the new coastal management performance measurement system developed in response to Congressional direction, the Administration's Performance Management Agenda, and findings of OMB's Program Assessment and Rating Tool review. In FY 2005, state coastal management programs began implementing performance measures under this system, which is designed to measure progress in achieving the objectives of the Coastal Zone Management Act.

In FY 2007, the Administration proposes to increase the amount of CZM grant funding that is awarded competitively under Sections 306A and 309. Increased competition and funding flexibility will enable the coastal management program to better focus available resources on significant national issues. During the current year, emphasis will be placed on developing resilient coastal communities and supporting regional coastal and ocean management initiatives. The administration plans to double the amount of competitively awarded funding this year (compared to FY 2005), and will work towards having 50% of CZMA funding awarded through a competitive process by FY 2009. NOAA plans to collaborate with its state partners to develop a process by which this goal can be met. NOAA will continue to actively support the Gulf rebuilding efforts through this program.

The coastal zone continues to be an economic engine for the Nation, as well as home to some of the Nation's most valuable natural resources. At the same time, these areas are facing increasing pressures from population growth and resource use. State and local coastal management programs are at the forefront of safeguarding the economic and environmental health of these areas. These

programs requires additional resources to respond to increasing coastal pressures and competing demands for limited space within the coastal zone for working waterfronts, coastal recreation, and protection of important habitats and land features, such as wetlands, dunes and floodplains.

NOAA requests an increase of \$575,000, for a total \$16,806,000, for the National **Estuarine Research Reserve System (NERRS).** The increase will allow NOAA to improve monitoring through a new Texas NERR, which is scheduled for designation in late 2006. This new reserve is located in a biogeographic region that is not currently represented within the



Many alligators inhabit the proposed 235,000 acre Texas NERR in the Mission Bay-Capano Bay-Aransas Bay system

System. This increase will provide operational funds for education, stewardship and research activities at the new Reserve. Specifically, funding will provide equipment and staffing support for physical and biological monitoring to implement the NERRS System Wide Monitoring Program. It will also support implementation of NERRS education and coastal training programs at the reserve, as well as stewardship programming to support NERRS strategic goals and objectives.

- NOAA requests an increase of \$628,000, and 1 FTE, for a total of \$7,605,000, and 48 FTE, in Coastal Zone Management Act Program Administration to administer the Coastal Zone Management Act and support an expanded National Estuarine Research Reserve System that includes a new reserve in Texas, as described above. The increase will support NOAA staff at the Office of Ocean and Coastal Resource Management to work with the new reserve and fund the associated travel, equipment, training, rent, and supply costs. When new reserves are designated, it is important that NOAA be able to provide technical assistance in research, monitoring, education, and resource stewardship to give new reserve programs a solid start. In addition, the increase will cover printing of revised reserve system information to include the Texas reserve, and contractual funds to update reserve system plans and performance measures for facilities, land acquisition, research and education to cover the addition of a new reserve.
- NOAA requests an increase of \$650,000, for a total of \$2,128,000, to support key science and analysis efforts fundamental to meeting NOAA's mandate under Executive Order 13158 to develop an effective national system of Marine Protected Areas (MPAs) built through integrating the sites and capabilities of existing federal, state, and tribal programs. With the requested

increase, NOAA's MPA Center will be able to advance several critical components of the National System of MPAs, including the completion of methodologies and tools to complete a natural and cultural resource characterization and analysis of human uses and impacts on the marine environment for the West Coast as a pilot study; beginning a process to work with stakeholders to use this information to identify priority areas for conservation of significant natural and cultural resources; and partially restore support for public outreach and the MPA Federal Advisory Committee, a diverse group of stakeholders and scientific experts providing advice to the Departments of Commerce and the Interior on National System development.

The U.S. has long used marine protected areas to manage and conserve some of our most important ocean areas. Executive Order 13158 was created to address the need identified by scientists and others for an effective, representative, National System of MPAs. The Executive Order established the MPA Center to lead this effort, coordinating across agencies, levels of government, and stakeholders. The requested funds are critical for supporting the capabilities needed to fulfill this mission. Without these funds, the MPA Center will lose momentum on developing the National System, and the long-term credibility of and support for NOAA's leadership on MPAs will be diminished.

#### • Ocean Management:

No changes from the base, for a total of \$35,218,000 and 140 FTE, are requested under Ocean the Management line item of the Ocean Coastal Management subactivity. Through this line item, NOAA administers the **National** Marine Sanctuary System under authority of the NMSA. There are 13



**Channel Islands National Marine Sanctuary** 

designated national marine sanctuaries, ranging in size from one-quarter square mile in Fagatele Bay, American Samoa to over 5,300 square miles in Monterey Bay, California which is one of the largest marine protected areas in the world. Together, these sanctuaries encompass over 18,000 square miles of waters and marine habitats. In addition, the NMSP administers and manages the 131,818 square mile Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve that is undergoing the

sanctuary designation process. The special habitats of the sanctuaries include deep ocean and near-shore corals, live bottom, whale migration corridors, deep sea canyons, areas of deep water upwelling, submerged banks that rise close to the ocean surface, kelp forests, and sea grass beds. With the increasing environmental pressures on our Nation's coastal areas, the importance of maintaining a system of marine protected areas is evident. The National Marine Sanctuary System is increasing our knowledge and understanding of complex marine ecosystems. NOAA's sanctuaries help monitor both human and natural changes in the environment that can help us preserve our marine environments.

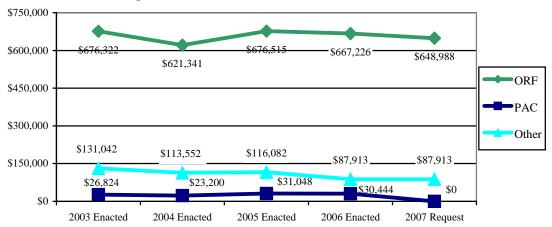
[Page intentionally left blank]



# **National Marine Fisheries Service**

(Dollars in Thousands)	FY 2006 Enacted	FY 2007 Base	Program Changes	Total Request			
National Marine Fisheries Service Operations, Research and Facilities (ORF)							
Protected Species Research and Management	\$145,039	\$122,428	\$22,496	\$144,924			
Fisheries Research and Management	282,408	265,746	25,916	291,662			
Enforcement and Observers	72,675	73,224	7,473	80,697			
Habitat Conservation and Restoration	46,629	28,698	11,198	39,896			
Other Activities Supporting Fisheries	70,177	48,104	7,257	55,361			
Alaska Compostite R&D	50,298	29,724	6,724	36,448			
Total, National Marine Fisheries Service - ORF	667,226	567,924	81,064	648,988			
Other National Marine Fisheries Service Accounts							
Total, National Marine Fisheries Service - PAC	30,444	0	0	0			
Total, National Marine Fisheries Service - Other	106,150	87,913	0	87,913			
GRAND TOTAL NATIONAL MARINE FISHERIES SERVICE (Direct Obligations)	\$803,820	\$655,837	\$81,064	\$736,901			
Total FTE	2,557	2,552	35	2,587			

#### **Budget Trends, FY 2003 – 2007** (dollars in thousands)



ORF: Operations, Research & Facilities

PAC: Procurement, Acquisition & Construction

Other: Fishermen's Contingency Fund; Foreign Fishing Observer Fund; Fisheries Finance Program; Promote and Develop; Pacific Coastal Salmon Recovery Fund; Pacific Coastal Salmon Treaty; and Environmental Improvement and Restoration Fund

www.nmfs.noaa.gov

#### **National Marine Fisheries Service**



NOAA's National Marine Fisheries Service (NMFS) is responsible for the management and conservation of living marine resources within the United States Exclusive Economic Zone (EEZ). NMFS also provides critical scientific and policy leadership in the international arena, and plays a key role in the management of living marine resources in coastal areas under state jurisdiction. NMFS implements science-based conservation and management measures and actions that are aimed at sustaining long-term use and promoting the health of coastal and marine ecosystems.

NMFS' ultimate mission and the focus of its day-to-day efforts is to maximize the benefits to the Nation from the protection and use (commercial, recreational, and aesthetic) of living marine resources. Under its numerous mandates, NMFS works to ensure the long-term health, productivity, and diversity of our Nation's ocean and coastal resources—fish, sea turtles, whales, and a myriad of other marine and coastal species and

their habitats. At the same time, NMFS is charged with balancing multiple needs and interests, including commercial, recreational, and subsistence fishing; aquaculture; and marine and coastal observation and research. These activities rely on a strong scientific and research competency to support the challenging public policy decision process associated with NOAA's stewardship responsibility.

NMFS continues to develop and track key performance measures that demonstrate meaningful results to our constituents and the American public. In FY 2007, NMFS will continue to focus resources on improving the status of overfished fisheries and endangered and threatened species; increasing the number of fish stocks and protected species whose population status is known; putting in place rebuilding, recovery, and conservation plans for major fish stocks and protected species; and restoring habitat for NOAA trust resources.

The FY 2007 President's Budget Request supports funding and program requirements to enable NMFS to be effective stewards of living marine resources for the benefit of the Nation through science-based conservation and management and the promotion of ecosystem health.

#### FY 2007 Budget Summary

NOAA requests a total of \$648,988,000 and 2,587 FTE to support the continued and enhanced operations of the National Marine Fisheries Service. The total includes \$4,557,000 for Adjustments to Base, \$81,064,000 for Program Increases, and \$103,859,000 in Terminations.

#### **ADJUSTMENTS TO BASE:**

NOAA requests a net increase of \$4,557,000 and 0 FTE to fund adjustments to base across all accounts in the National Marine Fisheries Service activities. With this increase program totals will fund the estimated FY 2007 Federal pay raise of 2.2 percent and annualize the FY 2006 pay raise of 3.1 percent. Program totals will provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration. The above amount includes a transfer of \$28,000,000 to the Office of Marine and Aviation Operations within Program Support.

#### NMFS – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2007:

NOAA requests a net increase of \$81,064,000 over the FY 2007 base for a total request of \$648,988,000. These changes are summarized at the subactivity level below. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2007 Technical Budget.

#### **Gulf of Mexico Initiative**

NOAA requests \$19.7 million for activities in the Gulf of Mexico. The major components of this initiative are incorporated in the following programs: Protected Species Research and Management, Fisheries Research and Management, Expand Annual Stock Assessments, Observers, and Other Activities Supporting Fish line items. The increase will support activities that are largely research driven such as Observers, Southeast Cooperative Research, Stock Assessments, Catch and Release Mortality, Economics and Social Science, and Highly Migratory Species. Expected benefits are increased knowledge of fish species through stock assessment studies; increased knowledge of impacts to fishing communities through socio-cultural surveys; and increased knowledge of the impacts of hurricanes on the commercial and recreational fisheries in the Gulf of Mexico ecosystem. As the Gulf region rebuilds, these programs will ensure that adequate science and management resources are available to promote and support sustainable and robust fisheries.

#### **Protected Species Research and Management**

\$144,924,000

A net increase of \$22,496,000 and 11 FTE above the base is requested in the Protected Species Research and Management subactivity, for a total of \$144,924,000 and 657 FTE. In addition to the programs listed below this net increase includes \$650,000 for Marine Turtles.

- Protected Species Research and Management Programs: \$5,825,000 (including a decrease of \$3,000 for conservation and recovery with states) and 7 FTE in net increases above the base, for a total of \$31,817,000 and 381 FTE, are requested under the Protected Species Research and Management Programs line item of the Protected Species Research and Management subactivity.
  - NOAA requests \$1,100,000 and 2 FTE to investigate ocean noise and its effects on the recovery of protected species. Rising levels of ocean noise and their potential effects on marine species, particularly on protected species, has



**Humpback Whale Breaching** 

become a significant emerging issue in marine conservation. Sources of ocean noise include (e.g., natural events earthquakes) and anthropogenic activities (e.g., seismic exploration, military commercial sonars. and shipping). Research on human non-human and species indicates that some levels of noise and chronic exposure to noise may affect health, reproduction, behavior, and survival. Recent strandings of marine mammals suggest there may be a relationship between some anthropogenic sound sources and these stranding events. Specific research will be directed at determining the characteristics of noise experienced by marine animals underwater, measuring the behavioral and auditory effects of exposure to ocean noise, and developing cost-effective mitigation measures for ocean noise effects.

- NOAA requests \$1,728,000 and 0 FTE to complete take reduction planning, recovery planning, ESA section 7 consultations, permitting, and mandatory ESA 5-year status reviews. This request will allow the Protected Species Program to continue court-ordered take reduction planning, complete Endangered Species Act (ESA) consultation on federal actions, develop programmatic National Environmental Policy Act (NEPA) documents for permits and Incidental Harassment Authorizations, revise recovery plans for sea turtles, and complete ESA 5-year status reviews for marine mammals and sea turtles.
- NOAA requests \$3,000,000 and 5 FTE to expand and modernize protected resources stock assessments by implementing Tier II of the Protected **Resources Stock Assessment Improvement Plan.** Currently, the status of more than 200 protected and at-risk marine species is unknown. The requested funding will allow NMFS to increase the number and quality of stock surveys and assessments on which to base regulatory decisions. These assessments provide timely and reliable estimates of distribution, abundance, and mortality for listed Imprecise estimates increase the possibility that species will be misclassified under the ESA or Marine Mammal Protection Act (MMPA), resulting in increased risk to the species, delay of recovery, and additional mitigation measures which, in turn, pose significant economic losses to the regulated community. NOAA is required to evaluate the status of listed species every year for MMPA listings and every 5 years for ESA listings, and to reclassify the affected listings as appropriate following these status reviews. Stock assessment priorities include large whales, Hawaiian cetaceans, loggerhead sea turtles, beaked and sperm whales, and coastal and oceanic bottlenose dolphins. This funding increase would enable NMFS to expand studies of stock structure through genetic profiling, improve telemetry techniques (e.g., satellite tagging) for documenting range and habitat use, and deploy new assessment technologies such as towed and autonomous passive acoustic arrays.
- Marine Mammals: \$1,759,000 and 0 FTE in net increases above the base, for a total of \$23,110,000 and 0 FTE, are requested under the Marine Mammals line item of the Protected Species Research and Management Subactivity—\$500,000 for recovery of large whales and \$1,260,000 for dolphin encirclement activities.
  - NOAA requests \$1,260,000 and 0 FTE to fully fund continued long-term monitoring of the Eastern Tropical Pacific dolphin stocks. NMFS is required

to conduct research to support the International Dolphin Conservation Program (IDCP). NMFS is the primary provider of information on the Eastern-Tropical Pacific (ETP) dolphin stocks for the IDCP. In addition to completing the population abundance monitoring cruise, in FY 2007 NMFS will start a cruise to determine the stock structure of coastal spotted dolphins. This funding will allow NMFS to



**Common Dolphin** 

maintain the tuna-tracking and verification program, which ensures that tuna sold as "dolphin-safe" meets that standard.

- Other Protected Species (Marine Fish, Plants, and Invertebrates): \$3,153,000 and 4 FTE in net increases above the base, for a total of \$8,085,000 and 45 FTE, are requested under the Other Protected Species (Marine Fish, Plants, and Invertebrates) line item of the Protected Species Research and Management Subactivity—\$853,000 for recovering those ESA-listed species that are not funded under a separate program and \$2,300,000 to initiate pilot proactive conservation efforts. The funding is critical to recovering those NMFS ESA-listed species that are not funded under a separate program, as well as those species nearing the need for ESA listing (Species of Concern).
  - NOAA requests \$2,300,000 and 1 FTE to initiate pilot proactive conservation efforts for species nearing the need for listing under the ESA. This pilot program aims to implement threat-reducing, on-the-ground conservation actions or management agreements to lower the risk of extinction for two species. These conservation efforts include close partnerships with state and federal agencies, industry, environmental groups, and academia. Adequate and statistically valid stock assessment information will be provided by observer coverage to determine which two species will be addressed. On average, NOAA spends approximately \$5 million per year on fulfilling consultations and permitting requirements for each listed species. NOAA intends to use this \$2.3 million investment to implement measures that will prevent a listing of either species, thereby eliminating the need to complete costly ESA consultations and permitting requirements. The outcomes of these conservation efforts will serve as case studies and the basis for other pilot projects. In addition, NOAA will develop a performance measurement system to evaluate the success of the pilot's conservation efforts in decreasing the number of listed species.

• Atlantic Salmon: \$1,445,000 and 0 FTE in net increases above the base, for a total of \$5,850,000 and 12 FTE, are requested under the Atlantic Salmon line item of the Protected Species Research and Management subactivity. This request will be used to implement the Atlantic salmon recovery plan, including research and management activities within NMFS that will provide additional capacity and resources for managers to protect the Atlantic salmon stocks.



**Atlantic Salmon** 

- Pacific Salmon: \$9,664,000 and 0 FTE in net increases above the base, for a total of \$66,416,000 and 193 FTE, are requested under the Pacific Salmon line item of the Protected Species Research and Management subactivity.
  - NOAA requests \$2,000,000 and 0 FTE to support section 7 consultations in response to Environmental Protection Agency (EPA) Pesticide Court **Decisions.** This increase will be used for necessary costs to meet court-ordered time lines for conducting ESA Section 7 consultations with EPA. Section 7 consultations are required by rulings on pesticide lawsuits in California, Oregon, Idaho, and Washington State. Other lawsuits are pending. NMFS can generally complete a draft biological opinion of average complexity in 135 days. However, because pesticide consultations are relatively new and often complex, NMFS estimates that initial development of draft biological opinions on pesticides may take significantly longer. NMFS and EPA are conducting a pilot consultation to test EPA's risk assessment methodology, which is the foundation of the new EPA Section 7 Counterpart Regulations. To date, NMFS has received more than 500 requests for consultation from EPA on approximately 40 pesticides subject to the aforementioned litigation. NMFS anticipates reviewing at least 100 pesticides each year for EPA, per standard Section 7 procedures, the Counterpart Regulations, and other general technical assistance. Where appropriate, NMFS' concurrence on actions not likely to adversely affect ESA-listed species and designated critical habitat will be incorporated into biological opinions with other pesticides to avoid the need to develop additional consultation documents.
  - NOAA requests an increase of \$7,664,000 and 0 FTE for recovery implementation and management actions and improved scientific advice for Pacific salmon recovery. This request will allow NMFS to complete habitat conservation planning, ESA Section 7 consultations, and recovery implementation. Efforts will also be focused on predicting ocean survival of

Pacific salmon, evaluating management actions, improving research on the effects of hatcheries on salmon recovery, and evaluations of the cost-effectiveness of various recovery actions. The requested funding will allow NMFS to fulfill its mandates of completing and implementing recovery plans for species threatened and endangered with extinction. This new funding will strengthen the ongoing management efforts currently in place for many species.

#### **Fisheries Research and Management**

\$291,662,000

A net increase of \$25,916,000 and 22 FTE above the base is requested in the Fisheries Research and Management subactivity, for a total of \$291,662,000 and 1,444 FTE. In addition to the programs listed below this net increase includes \$500,000 for Fisheries Oceanography, \$100,000 for Anadronomous Grants, and a program decrease of \$1,905,000 for Salmon Management Activities.

- **Fisheries Research and Management Programs**: \$6,829,000 and 7 FTE in net increases above the base, for a total of \$131,620,000 and 1,360 FTE, are requested under the Fisheries Research and Management program line item.
  - NOAA requests an increase of \$2,829,000 and 7 FTEs for a total request of \$5,798,000 for Regulatory Streamlining and Modernization. NOAA will add additional staff, and the Regional Fishery Management Councils will receive additional support, dedicated to the development and review regulations within timeframes required by law. The additional support will allow NMFS and Councils the to frontload development, analysis, evaluation, and implementation of fishery management actions. This increase will improve the quality and timeliness of the regulatory processes that affect



Commercial landings (edible and industrial) by U.S. fisherman in the 50 states were 9.6 billion pounds valued at \$3.7 billion in 2004

fisheries at the state and local level by reducing the time required for consultations, permits and other regulatory requirements. NOAA will also develop and maintain an electronic rulemaking system to speed up the processing of rules and regulations and increase public participation. Improved quality and

timeliness of regulatory processes combined with policy development will result in better-managed stocks and decreased litigation.

• Expand Annual Stock Assessments—Improve Data Collection: \$7,550,000 and 8 FTE in net increases above the base, for a total of \$32,100,000 and 59 FTE, are requested under the Expand Annual Stock Assessments—Improve Data Collection line item of the Fisheries Research and Management subactivity. The request will strengthen stock assessment efforts and initiate new ecosystem-based fish stock assessments and fishery-dependent sampling programs in the Gulf of Mexico. Additionally, NOAA requests \$500,000 for the Southeast Data, Assessment, and Review process and \$300,000 to sustain national stock assessment initiatives.

Monitoring programs collect data on landings, fishing effort, discarded bycatch, and life history data (growth, longevity, and mortality). NOAA will enhance existing monitoring programs by collecting data on the location of fishing activities and the co-occurrence of different species in Gulf of Mexico commercial and recreational fisheries. **NOAA** requests \$1.750.000 to improve existing fisherydependent data management systems (e.g., equipment purchases and expansion of sampling



Measuring the catch

activities) and to develop new modes of disseminating expanded data sets to constituents and policymakers (e.g., computer programming and technical support).

A requested increase of \$2,000,000 within this line will enhance the Strengthen Living Marine Resources program. This effort provides additional charter vessel days-at-sea for expanded fishery resource surveys, restores cutbacks in historical survey effort, and partially offsets rapid increases in annual fuel costs for current surveys. It continues operational development of the Fisheries Scientific Computer System (FSCS), a project to automate at-sea data collections and error checks for fishery-independent surveys, linking biological and physical data streams.

• Economics and Social Sciences Research: \$6,518,000 and 7 FTE in net increases above the base, for a total of \$10,529,000 and 25 FTE, are requested under the Economics and Social Sciences Research line item of the Fisheries Research and Management subactivity. NOAA will concentrate its socioeconomic survey activities in the commercially important Gulf shrimp and reef fish fisheries; the Pacific Coast, Alaska, and Northeast groundfish fisheries; the Atlantic sea scallops fishery; and the Atlantic, Gulf of Mexico, Pacific, and Western Pacific Highly Migratory Species fisheries.

Of this request, 2,500,000 will increase the number of economic surveys conducted in commercial fisheries by supporting economists, anthropologist, and survey technicians. This will allow us to initiate new economic data collection programs that will provide data for 20 fishery management plans (FMP). The increase in economic surveys will enable NOAA to meet 100% of the economic and sociocultural monitoring goals for 32 commercial FMPs. These socioeconomic surveys will enable NOAA to conduct integrated assessments of benefits derived from the marine resource; assess the economic effects of large-scale environmental events such as hurricanes, hypoxia, and red tide; and evaluate the costs and benefits from proposed management options, including adopting market-based management approaches such as Dedicated Access Privileges (DAP). An additional \$1,100,000 will provide for community profiles on labor trends, dependence on fishing and other marine resource—dependent industries, and coastal community migration patterns.

Regional **Councils** and **Fisheries Commissions:** \$3.047.000 and 0 FTE in net increases above base, for a total of \$26,312,000 and 0 FTE, are requested for the Regional Councils and Fisheries Commissions line item of the Fisheries Research and Management subactivity. This funding will expand the Regional Fisheries Management Councils (RFMCs) operational capability to analyze a greater range of alternatives and more fully consider the impacts of proposed actions on the marine ecosystem as they develop



**Beach Anglers** 

new Fishery Management Plans (FMPs) or amendments to current plans. With this funding, NMFS will improve the quality and timeliness of regulatory processes and policy development for its Fishery Management Program through comprehensive impact analyses, full and timely consideration of all relevant issues, and compliance with all applicable laws and procedures. The improvements in the regulatory process obtained through this funding will reduce the legal challenges to NOAA regulatory actions. NOAA will also make \$1,000,000 available for RFMCs to develop DAP programs, such as individual fishing quotas (IFQs). Development of DAP programs requires significant resources for economic analysis and design of programs for eligibility determination, permit issuance, and fishery monitoring. These funds will be made available on a competitive basis to support Councils with projects that advance DAP systems.

• **Fish Information Networks:** \$2,109,000 and 0 FTE in net increases above the base, for a total of \$22,184,000 and 0 FTE, are requested under the Fish Information Networks line item of the Fisheries Research and Management subactivity. NOAA's request will support three activities—the Gulf Fisheries Information Network (Gulf

FIN) program; the Marine Fisheries Initiative Network (MARFIN) program; and the Fisheries Information System program. This request will enable the expansion of standard commercial fisheries "trip ticket" dealer reporting programs to Texas and Mississippi; support pilot testing of new survey methods for recreational shore and private/rental boat fishing effort; provide MARFIN grants for research and development projects that optimize the use of fisheries in the Gulf of Mexico and South Atlantic; and expand standardized electronic dealer reporting of commercial fishery landings data to one additional state. The request will improve NOAA's ability to increase the quantity of data and improve the quality of statistics that are used to inform regulatory decisions for marine commercial and recreational fisheries located off the coasts of Alabama, Florida, Georgia, Louisiana, Mississippi, and Texas.

• Survey and Monitoring Projects: \$1,168,000 and 0 FTE in net increases above the base, for a total of \$15,223,000 and 0 FTE, are requested under the Survey and Monitoring Projects line item of the Fisheries Research and Management subactivity. The request will to enable NOAA to: (1) effectively manage West Coast groundfish fisheries by maintaining the ability to monitor and estimate discards of overfished stocks; (2) continue tagging activities currently related to bluefin tuna research in order to estimate the distribution and abundance of bluefin tuna stocks; and (3) enable scientists to continue research on the factors governing the apparent decline in bluefish abundance along the Atlantic coast.

# **Enforcement and Observers/Training**

\$80,697,000

A net increase of \$7,473,000 and 2 FTE above the base is requested in the Enforcement and Observers/Training subactivity, for a total of \$80,697,000 and 251 FTE.

- **Enforcement:** \$3,979,000 and 0 FTE in net increases above the base, for a total of \$53,901,000 and 188 FTE, are requested under the Enforcement line item of the Enforcement and Observer/Training subactivity.
  - NOAA requests an increase of \$2,268,000 and 0 FTE for a total of \$24,255,000 for Enforcement and Surveillance. The requested increase in the Enforcement and Surveillance base will allow NOAA's Enforcement Program to address the increased workload of the new regulations in the Northeast Region (Northeast Shelf Large Marine Ecosystem (LME)) and Southeast Region (Gulf of Mexico LME). At the same time, the efficiency, effectiveness, and capacity of the Investigations Capability and the Monitoring Capability will be improved. The expanded investigative and analytical capacity is expected to increase efficiencies within NOAA's homeland security program while supporting the Department of Homeland Security (DHS) efforts and the homeland security and commercial fishing regulation activities of the U.S. Coast Guard.

- NOAA requests an increase of \$1,711,000 and 0 FTE for a total of \$17,535,000 for Cooperative Agreements with States. This increase will allow the expansion of the cooperative agreement program with states to address additional monitoring requirements of current and expected regulations. The advent of the Red Snapper IFQ (dedicated access program) in the Gulf of Mexico during FY 2007 will create a significant need for enforcement monitoring which can be enhanced by state enforcement partners. In addition, NOAA will expand to other state and U.S. territorial enforcement support services based on regional priorities.
- **Observers/Training:** \$3,494,000 and 2 FTE in net increases above the base, for a total of \$26,796,000 and 63 FTE, are requested under the Observers/Training line item of the Enforcement and Observer/Training subactivity. NMFS' observer data will provide a comprehensive understanding of marine systems to meet the environmental, economic, and public safety needs of the Nation. This level of funding will enable the expansion of observer coverage in the Gulf of Mexico; initiate observer coverage in priority fisheries nationwide; and support 35,000 observer collection days in the North Pacific. This request will support increases in the number of days-at-sea for observer coverage in the shrimp trawl fishery and initiation of observer programs in the red



**Marine Patrol** 

snapper and reef fish fisheries by 833 DAS in the Gulf of Mexico.

#### **Habitat Conservation and Restoration**

\$39,896,000

A net increase of \$11,198,000 and 0 FTE above the base is requested in the Habitat Conservation and Restoration subactivity, for a total of \$39,896,000 and 235 FTE.

- Sustainable Habitat Management: \$3,698,000 and 0 FTE in net increases above the base, for a total of \$18,760,000 \$2,800,000 for NOAA Fisheries Service new hydropower provision requirements under the Energy Policy Act of 2005, and \$898,000 to support Refine Essential Fish Habitat (EFH) Designations activities.
  - NOAA Fisheries Service requests an increase of \$2,800,000 to support its new hydropower provision requirements under the Energy Policy Act of 2005. Specifically, the Energy Policy Act requires Department of Commerce (DOC), along with Department of the Interior (DOI) and U.S. Department of Agriculture (USDA), to jointly establish a 90-day trial-type hearings process for the agencies' prescriptions (DOC and DOI) and conditions (DOI and USDA). The hearings will resolve disputed issues of material fact with respect to conditions or prescriptions for inclusion in hydropower licenses issued by the Federal Energy Regulatory

Commission under the Federal Power Act. The increase will help pay the U.S. Coast Guard for use of its Administrative Law Judges, and to augment technical and legal capabilities (attorneys) in NMFS Headquarters and Regional Offices to address the workload generated by the new processes.

- **Fisheries Habitat Restoration:** \$7,500,000 and 0 FTE in net increases above the base, for a total of \$21,136,000.
  - NOAA Fisheries Service requests a \$1,500,000 increase to establish a Great Lakes Habitat Restoration Program. In 2004, Executive Order 13340 was signed creating the Great Lakes Interagency Task Force establishing a regional collaboration of federal partners, including DOC, to restore the Great Lakes. This increase will enable NOAA to establish a Great Lakes Habitat Restoration Program, thereby mobilizing NOAA's restoration assets to restore the Great Lakes' aquatic resources. NOAA will identify an optimal restoration plan and its intended benefits, evaluate the socio-economic consequences, and monitor the success of the restoration effort in achieving its goals. To monitor the effectiveness of NOAA's Great Lakes Habitat Restoration Program, the program targeted an increase to the GPRA performance measure target (i.e., acres restored per year). Additionally, the Great Lakes Restoration Program will provide the necessary outreach, facilitation and technical assistance to stakeholders and communities participating in the restoration activities. Overall, this program will develop a strong NOAA presence and leadership in habitat restoration within the Great Lakes region.
  - NOAA Fisheries Service requests an increase of \$6,000,000 to support the Open Rivers Initiative (ORI). ORI supports the President's Cooperative Conservation Initiative (Executive Order 13352) which directs federal agencies to promote cooperative conservation in full partnership with state. governments, tribes and individuals. This increase enhances the repair of vital ecosystems; benefits communities; and enhances populations of key NOAA trust species. ORI will be



Mill Creek dam removal

a competitive grant program that builds on NOAA's capabilities and utilizes a community-based model to remove obsolete river barriers in coastal states. While most U.S. dams serve their intended functions, many no longer provide the benefits for which they were built. ORI is expected to provide an economic boost for communities, enhance public safety, and improve populations of NOAA trust resources (e.g., Atlantic and Pacific Salmon). All barrier-removal projects will

benefit from a collaborative process that engages a wide array of partners, including municipalities, state government, and private owners.

# **Other Activities Supporting Fisheries**

\$55,361,000

A net increase of \$7,257,000 and 0 FTE above the base is requested in the Other Activities Supporting Fisheries subactivity, for a total of \$55,361,000 and 0 FTE. In addition to the programs listed below this net increase includes \$626,000 for Information Analyses and Dissemination, and \$501,000, for Climate Regimes and Ecosystem Productivity.

• Computer Hardware and Software: \$1,383,000 and 0 FTE in net increase above the base are requested, for a total of \$3,355,000 for Computer Hardware and Software. These funds will restore NMFS' ability to fund required maintenance contracts on software and to maintain software products currently used to support critical mission requirements. In addition, funding will provide support for essential contract staff in Headquarters and Regional sites involved in processing NOAA's scientific and law enforcement data for enterprise applications. These data are central to the stewardship of commercial and recreational fishing and of protected species and their habitats. Restoring these funds will allow for the essential maintenance of crucial security hardware and software used for preventing and monitoring security risks and vulnerabilities to NMFS' network.

# **Alaska Composite Research and Development Program**

\$36,448,000

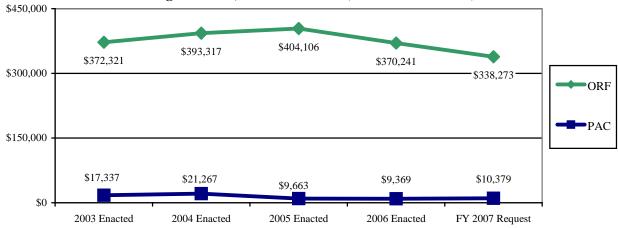
A net increase of \$6,724,000 and 0 FTE above the base is requested in the Alaska Composite Research and Development Program subactivity, for a total of \$36,448,000 and 0 FTE. Of the \$36,448,000, \$29,479,000 provides base funds to the Alaska Regional Office and Alaska Fisheries Science Center to conduct assessment and management activities for Alaska finfish (pollock and other groundfish, halibut/sablefish), crustaceans (crab), and salmon. Two of the Nation's top three fishing ports, in terms of highest dollar value for commercial landings, are in Alaska. These base funds also support assessment and conservation activities for Alaska whales, seals and sea lions. The remaining \$6,969,000 will be provided to the state of Alaska, Non-Governmental Organizations, and Alaska native partners for research and co-management activities.



# Office of Oceanic & Atmospheric Research

(Dollars in Thousands)	FY 2006 Enacted	FY 2007 Base	Program Changes	Total Request			
Office of Oceanic & Atmospheric Research Operations, Research and Facilities (ORF)							
Climate Research	\$169,584	\$163,442	\$17,709	\$181,151			
Weather and Air Quality Research	67,570	36,796	4,434	41,230			
Ocean, Coastal, and Great Lakes Research	126,676	94,347	8,629	102,976			
Information Technology, R&D, and Science Education	6,411	6,442	6,474	12,916			
Total, Office of Oceanic & Atmospheric Research - ORF	370,241	301,027	37,246	338,273			
Other Office of Oceanic & Atmospheric Research Accounts							
Total, Office of Oceanic & Atmospheric Research - PAC	9,369	9,395	984	10,379			
Total, Office of Oceanic & Atmospheric Research - Other	0	0	0	0			
GRAND TOTAL OFFICE OF OCEANIC & ATMOSPHERIC RESEARCH (Direct Obligations)	\$379,610	\$310,422	\$38,230	\$348,652			
Total FTE	710	714	0	714			

## **Budget Trends, FY 2003 – 2007** (dollars in thousands)

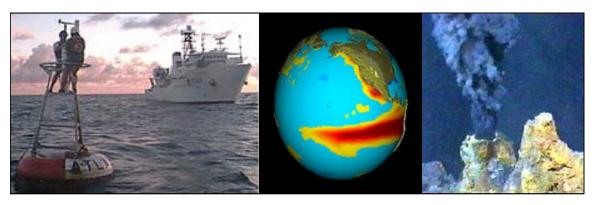


ORF: Operations, Research & Facilities

PAC: Procurement, Acquisition & Construction

www.oar.noaa.gov

# Office of Oceanic & Atmospheric Research



The primary focus for research and development within NOAA is the Office of Oceanic and Atmospheric Research (OAR), often referred to as NOAA Research. OAR conducts the scientific research, environmental studies, and technology development needed to improve NOAA's operations and broaden our understanding of the Earth's atmospheric and marine environmental systems. OAR currently consists of 7 internal research laboratories and manages or facilitates extramural research at 30 National Sea Grant colleges, universities, and research programs; several undersea research centers; a research grants program through the Climate Program Office; and 13 cooperative institutes with academia.

OAR's activities are organized along four themes: (1) Climate Research; (2) Weather and Air Quality Research; (3) Ocean, Coastal and Great Lakes Research; and (4) Information Technology R&D and Science Education. The goals of these four theme areas are to:

- Understand complex climate systems to improve predictions.
- Understand atmospheric events to assist in saving lives and property worldwide.
- Explore, investigate, and understand the complexities of all our coastal, Great Lakes, and ocean habitats and resources.
- Accelerate adoption of advanced computing, communications, and information technology throughout NOAA and support science education, expanding the pipeline of potential future environmental scientists and researchers for industry, academia, and government.

The research is carried out through a national network of more than fifty Federal laboratories and university-based research programs. With this diverse research "tool kit," OAR:

- Provides national and international leadership on critical environmental issues.
- Addresses the environmental R&D needs of internal NOAA customers, states, industry, the Department of Commerce, and other Federal agencies.

OAR researchers represent the cutting edge in sustained, long-term environmental observations and modeling; their contributions enhance the health and economic well-being of society.

# FY 2007 Budget Summary

NOAA requests a total of \$338,273,000 and 714 FTE to support the continued and enhanced operations of the Office of Oceanic & Atmospheric Research. The total includes \$37,246,000 in Program Increases as well as \$75,400,000 in program decreases within the base.

#### **ADJUSTMENTS TO BASE:**

NOAA requests a net increase of \$6,203,000 and 0 FTE to fund adjustments to base across all accounts in the Office of Oceanic and Atmospheric Research activities. With this increase program totals will fund the estimated FY 2007 Federal pay raise of 2.2 percent and annualize the FY 2006 pay raise of 3.1 percent. Program totals will provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration.

#### OAR – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2007:

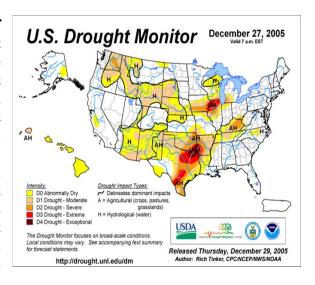
NOAA requests a net increase of \$37,246,000 and 0 FTE over the FY 2007 base for a total request of \$338,273,000 and 714 FTE. These changes are summarized at the subactivity level below and to be concise, do not include descriptions below \$1,000,000. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2007 Technical Budget.

Climate Research \$181,151,000

An increase of \$17,709,000 and 0 FTE above the base is requested in the Climate Research subactivity, for a total of \$181,151,000 and 354 FTE.

- Competitive Research Program: \$12,052,000 and 0 FTE in net increases above the base, for a total of \$125,712,000 and 102 FTE, are requested under the Climate Observations & Services line item of the Climate Research subactivity.
  - Integrated Ocean Observing System (IOOS): Global Ocean Observing System for Climate. NOAA requests an increase of \$6,052,000 and 0 FTE to continue building and maintaining the Global Ocean Observing System for climate, which is the global component of the Integrated Ocean Observing System and the ocean component of the Global Earth Observation System of Systems (GEOSS). This program change will complete 59% of the planned ocean observing system, keeping us on track with our international commitment of completing the ocean climate observing system by 2010. In 2007, NOAA, in cooperation with national and international partners, will make incremental advancements across all ocean observing networks with emphasis on these priority areas: (1) ocean circulation to monitor for possible indications of abrupt climate change, and for monitoring the climate's influence on marine ecosystems; (2) ocean storage of carbon in support of National policy decisions; (3)oceanic contributions to the global water cycle especially in support of drought early warning and diagnostics. This request responds to the long-term observational requirements of the operational forest centers, international research programs, and major scientific assessments. This investment is one of the high priority investments required for NOAA's implementation of IOOS as the ocean component of GEOSS in response to the U.S. Ocean Action Plan. To augment current activities in establishing a natural, sustainable Data Management and Communications standards ongoing (DMAC) infrastructure. development will lead to interoperable data access and dissemination across observing systems. The immediate plan will be to establish as an element of the Global Ocean Data Assimilation Experiment (GODAE). The server capability must be continued in support of sustained earth observation.

NOAA requests an increase of \$4,000,000 and 0 FTE to support drought impact research for the **National Integrated Drought** Information System (NIDIS) and Regional **Decision** Support **Partnerships:** with Coping **NIDIS** Drought. The Plan, endorsed bv the Western Governors' Association, states that the development, integration, and maintenance of "a suite of drought decision support and simulation is fundamental for NOAA will success of NIDIS." integrated, problemsponsor



focused research and research-to-operations transition projects addressing the effects of drought on society and economically productive sectors of the U.S. economy. Specifically, this effort will: (1) provide the resources for a new Integrated Sciences and Assessments (RISA) award in a region Regional sensitive to drought; (2) implement a targeted cross-regional Drought Research Initiative to focus and enhance research and stakeholder interaction in support of local and regional entities addressing the impacts of the severe, sustained drought in the western United States; (3) identify via a sector-based impacts research effort the economic and social effects of drought (across and outside the United States; (4) conduct an examination of drought decision support and water management in a river basin (e.g., Colorado River Basin) to assess the present use of climate information and gaps in our knowledge, and recommend improvements for more effective management of river basin resources; and (5) meet user requirements for the development of end-stage climate information tailored for specific decision needs associated with operational activities. This investment will produce climate service products for use by local, state, and regional decision makers in sectors affected by drought. The effort will also enable an evaluation of the economic impact of new operational information and/or services, which will allow NOAA to more efficiently and effectively deliver optimized decision support tools for drought.

\* Explain Climate Conditions to Improve Predictions. NOAA requests \$2,000,000 and 0 FTE to develop new climate reanalysis data sets that will improve operational climate prediction. This effort represents a key NOAA contribution to the interagency U.S. Climate Change Science Program (CCSP) goal of improving knowledge of Earth's climate and environment (both past and present) and the causes of observed variability, whether natural or human-induced. These datasets will: (1) substantially reduce current uncertainty about

historical climate variations and (2) improve our ability to detect and analyze interannual-to-decadal variability and weather-climate trends for the entire 20th century and emerging 21<sup>st</sup> century trends, providing a better understanding of mechanisms leading to climate extremes, e.g., the 1930's Dust Bowl. The dynamic Climate Forecast System at NOAA's National Centers for Environmental Prediction is calibrated against the current reanalysis data sets. Updating the reanalysis will yield better model calibration, verification, and initialization. Ultimately, this will provide better climate outlooks. An improved

ability to interpret causes of observed climate variability will provide policy-makers with critically needed explanations of current and future regional climate conditions, including major droughts, floods, prolonged warm or cold conditions, climate trends and extremes, and multi-decadal variability.

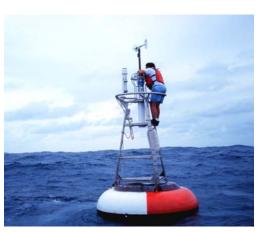
- Climate Data & Information: \$3,904,000 and 0 FTE in net increases above the base, for a total of \$6,266,000 and 4 FTE, are requested under the Climate Data & Information line item of the Climate Research subactivity.
  - NOAA requests an increase of \$1,161,000 and 0 FTE in support of Climate **Reference** Network the (CRN). This increase will document long-term changes in climate (50-100 years) by making available a more robust climate record and better climate benchmarks. The CRN is an integral component of NOAA's plans for an Integrated Surface Observing System (ISOS) and directly contributes to the U.S. Global Environmental Observation Integrated Earth Observing System (IEOS). CRN data serve over 100,000



**CRN Site** 

users each year from government, academia, and the private sector. Specifically, NOAA will install and commission the remainder of the full network of 114 stations and provide adequate life-cycle operations and maintenance. NOAA will continue completing its plan for the full implementation of the network, tracking more than 95% of the variability in our national annual precipitation and 98% of annual temperature variability.

NOAA requests an increase of \$2,743,000 and 0 FTE in support of the Global Climate Observing System (GCOS). The U.S. GCOS project directly supports NOAA's goal to develop an Integrated Global Environmental Observation and Data Management System. GCOS proactively seeks to increase the number of partnerships promoting regional and local cooperation in global observations (land and open/coastal ocean regions) and data management programs. **GCOS** represents Administration's commitment in supporting global observing system partnerships with



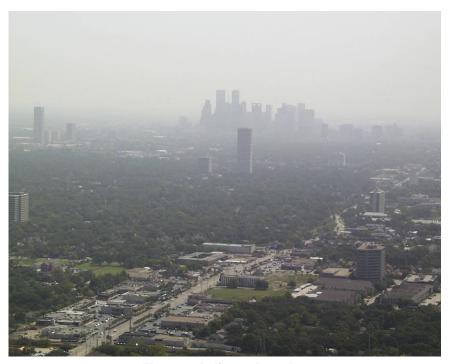
Maintaining Atlas TOGA-TAO buoys on the equatorial El Nino array

developing nations: "[a global observing system to monitor climate] must include developing countries that have limited resources to make the necessary measurements the United States must provide resources to help build climate observation systems in developing countries throughout the world, and call upon other developed countries to provide matching funds for such an investment" (President Bush, The White House Rose Garden, June 11, 2001). Funding will: (1) retrofit GCOS Upper-Air Network (GUAN) sites in developing nations; (2) provide expendable equipment (e.g., radiosondes and balloons); (3) install new reference GCOS Surface Network (GSN) sites in developing nations and unique climate regimes; (4) support the Pacific Islands Regional GCOS Program and its sister program, the Pacific Islands Regional Global Ocean Observing Program, which have proven to be invaluable in maintaining a sustainable and robust regional observing program in a climate-sensitive region; (5) continue other associated GCOS activities to improve quality and calibration of global datasets on precipitation chemistry, solar radiation, and regional precipitation networks; and (6) continue NOAA's role as the GCOS Lead Center for GCOS Surface Network (GSN), which is critical in managing the data from the various global GCOS networks.

- Climate Operations: \$528,000 and 0 FTE in net increases above the base, for a total of \$886,000 and 0 FTE, are requested under the Climate Operations line item of the Climate Research subactivity.
  - NOAA requests an increase of \$528,000 and 0 FTE to support Climate Services activities. NOAA's Regional Climate Services activities provide NOAA customers (farmers, utilities, land managers, business owners, energy, reinsurance, weather-risk industry, and decision makers) with operational service outlets and customer interfaces for climate data and information products and climate forecasts and their regional impacts. For example, the Pacific El Niño Southern Oscillation (ENSO) Applications Center (PEAC) in Honolulu works to improve climate products and services for the western Pacific islands and Hawaii. This activity forms the backbone of the customer service and information distribution to be leveraged for the National Integrated Drought Information System (NIDIS). The restored funding will: (1) continue training programs that ensure (a) efficient and optimal use NOAA climate products and data services, (b) easily explained forecasts, and (c) expanded field support for NIDIS resulting from enhanced understanding of drought; (2) enhance web tools and forecast product development to expand use of NOAA climate data information, predictions, and services; and (3) sustain customer interactions to ensure NOAA climate products are readily accessible, well understood, and optimally used.

An increase of \$4,434,000 and 0 FTE above the base is requested in the Weather and Air Quality Research subactivity, for a total of \$41,230,000 and 184 FTE.

• Laboratories & Joint Institutes: \$2,420,000 and 0 FTE increase above the base, for a total of \$38,258,000 and 182 FTE, are requested under the Laboratories & Joint Institutes line item of the Weather and Air Quality Research subactivity.



Houston skyline on hazy day

NOAA requests an increase of \$2,420,000 and 0 FTE to characterize processes that produce particulate matter in the atmosphere as part of an extended regional air quality assessment capability. There is growing evidence that airborne particulate matter (PM), including dust, soot, and sulfates, can trigger cardiac problems—leading to tens of thousands of deaths annually. NOAA's two most essential contributions to the Nation's response to air quality issues are: (1) providing objective scientific information about the causes of problems to inform effective decision-making; and (2) providing air quality forecast guidance so communities can effectively respond to episodes of poor air quality. This increase would enable NOAA to extend its biennial regional air quality assessments to include characterization of key PM processes. This information will allow policy-makers at all levels of government, environmental managers, and regulated parties to focus their efforts on the main drivers of PM problems, leading to improved air pollution strategies that both protect public

health and maintain a vital economy. Past NOAA assessments for ozone have led to significant modifications of strategies with associated economic savings of billions of dollars. The information about key PM processes will also support NOAA's initiation of PM predictions by providing the scientific basis for developing accurate PM models.

The requested funding will allow NOAA to develop and apply advanced particulate matter instrumentation to characterize the sources and processes responsible for the emission, atmospheric formation, growth, and transport of PM. These instruments will measure key characteristics of particulate matter, such as concentrations, composition, and transformation rates. Once developed and tested, these instruments will be deployed during month-long field experiments to study processes that are important in a region. Significant findings will be reported to air quality decision-makers in a form that enables them to understand and apply new scientific insights. To leverage available resources, the field studies will be conducted in collaboration with NOAA's climate program (PM—also known as "aerosols"—has a significant influence on climate) and with other agencies, universities, and the private sector.

# ■ NOAA requests an increase of \$2,014,000 and 0 FTE to for Tornado/Severe

Storm Research (Phased-Array Radar). NOAA is developing new technologies for forecasting and detecting tornadoes and other forms of severe weather and to disseminate this information to emergency managers, the media, and the general public for appropriate action. Phased-array radar has the potential to significantly extend lead times for tornadoes and other forms of severe and hazardous weather. Faster scan rates can reduce the time it takes to make a complete Doppler radar observation from six minutes to less than one minute. Coupled with artificial-intelligence-based decision-support systems, tornado lead times could be almost doubled from 12 to 22 minutes.



Installation of the SPY-1A antenna and radome on the NWRT

Major components of this program are continued research support and the construction of and experimentation with a phased-array research test bed at the National Severe Storms Laboratory (NSSL) in Norman, OK. Congress established a joint R&D program for NOAA, DOD, and FAA to investigate the feasibility and benefits of using military phased- array radars for improving severe weather forecast and warning systems. U.S. Navy SPY-1 Phased-Array Radar technology holds considerable promise for making significant improvements to the existing WSR-88D system. Using multiple beams and frequencies, The SPY-1 Phased-Array Radar reduces the scan time for severe weather from six minutes to less than one minute, which can lead to increased lead times for warnings of tornadoes

and other forms of hazardous weather. NOAA/NSSL is designated to operate and maintain the equipment, provide facilities, approve associated research.

# Ocean, Coastal, and Great Lakes Research

\$102,976,000

An increase of \$8,629,000 and 0 FTE above the base is requested in the Ocean, Coastal, and Great Lakes Research subactivity, for a total of \$102,976,000 and 163 FTE.

• NOAA requests an increase of \$4,990,000 and 0 FTE for a total of \$9,152,000 and 6 FTE for the National Undersea Research Program (NURP). This will

restore NURP's capability to provide stateof-the-art undersea research capabilities that are geographically balanced across the U.S. In FY 2006, NURP maintained only minimal support and, thus, a very limited capability to support undersea research off the Atlantic coast and in the Gulf of Mexico and Caribbean regions. The West Coast and Polar Regions also operated under reduced funding and provided limited research support to this large region. complies with Congressional mandates and Ocean Action Plan recommendations and serve scientists and the general public by providing cutting-edge undersea research and technologies which better enable managers and stakeholders to serve as stewards of our Nation's natural resources. This initiative will allow NURP to provide such support across both ocean basins in an efficient, balanced, and cost-effective manner on both East and West coasts and will include:



NURP undersea technology is used to investigate deep-sea corals & how to protect them

- Establishing sufficient capability to meet NOAA's undersea research technology needs for the East coast, Gulf of Mexico, and the Caribbean.
- Restoring funding to the West Coast and Polar Regions center to meet research requirements in support of the region and NOAA/NURP missions.
- NOAA requests an increase of a total of \$1,513,000 and 0 FTE for the Ocean Exploration Program for a total program of \$15,128,000 and 11 FTE. This increase will restore key investments in the Nation's only program dedicated to systematically exploring the world's oceans. It will support NOAA's ability to fulfill its scientific, environmental assessment, and technology development responsibilities.

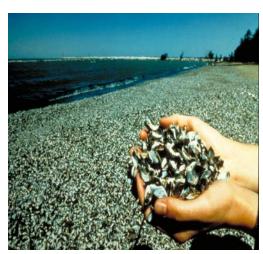
In response to the U.S. Commission on Ocean Policy's recommendations for a National Ocean Exploration Program, the U.S. Ocean Action Plan highlighted the development of a new NOAA vessel dedicated to ocean exploration. In September of 2004, NOAA obtained this vessel, the *Okeanos Explorer*.



The soon-to-be NOAA Ship OKEANOS EXPLORER

Specifically, the increase will provide funding for ocean exploration projects using the University National Oceanographic Laboratory System (UNOLS) fleet and National Deep Submergence Facility (NDSF) facilities:

- UNOLS and NDSF Facilities (\$1,000,000) Funds will continue Ocean Exploration (OE) investments in UNOLS fleet and NDSF assets. Based on budget projections for FY 2007, \$1,000,000 will lease approximately 20 days of ship and submersible time using a Class-I UNOLS ship and either the ALVIN submersible or JASON ROV. The specific ship/submersible combination will be based on the scientific requirements of the project.
- Extramural Scientific Support (\$513,000) Funds will enable extramural scientists to participate in two ocean exploration missions. One major expedition focusing on deep-water habitat characterization will use the UNOLS/NDSF asset combination. The second project will leverage funding for an existing research cruise by providing add-on funds dedicated for an exploratory component. Final project selections will be made through a peer-reviewed grant proposal process.
- NOAA requests an increase of \$1,506,000 and 0 FTE for its Aquatic Invasive **Species (AIS) Program.** This increase will provide a total of 4 FTE and \$4,083,000 for NOAA's Aquatic Invasive Species Program and will augment current NOAA's efforts to address invasive species, a worldwide threat that has implications for our marine resources, and add a critical new component, namely preventing invasive species before they occur. Funding will support research to increase NOAA's capability to identify and assess species and pathways that pose the highest invasion threat to U.S. coastal, estuarine, and Great Lakes resources and will develop tools to prevent invasion by



Aquatic Invasive Species (such as zebra mussels) cause billions of dollars in damage

these pathways. These improved prediction skills and interdiction tools will help meet NOAA's legal invasive species mandates and will move NOAA from a reactive to a proactive mode to reduce the number of new invasions in the targeted pathways. It is essential for the Nation's economic and ecological welfare that we develop the scientific basis to identify and assess the level of risk associated with different pathways on a regional basis in order to focus resources where they are most needed and will do the most good.

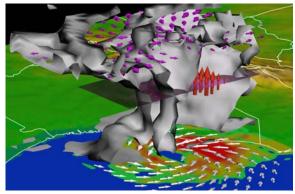
NOAA requests an increase of \$741,000 and 0 FTE for the NOAA's National Sea Grant. NOAA's National Sea Grant College Program enhances the development, use, and conservation of the Nation's marine and Great Lakes resources through a network of Sea Grant Colleges that conduct education, training, and research in all fields of marine and Great Lakes study. The 30 state Sea Grant programs, located in every coastal and Great Lakes state and Puerto Rico, serve as the core of a dynamic national network of more than 300 participating institutions involving more than 3,000 scientists, engineers, outreach experts, educators and students. The Sea Grant network addresses key issues and opportunities in areas such as aquaculture, aquatic invasive species, coastal community development, estuarine research, fisheries management, coastal hazards, marine biotechnology, marine engineering, seafood safety and water quality. As a non-regulatory program, Sea Grant focuses on generating and disseminating science-based information to a wide range of groups. Some of these include: commercial and recreational fishermen, educators, fish farmers, state and local planning officials, port and harbor commissioners, seafood processors and retailers, and natural resource, water and environmental quality managers.

### Information Technology, R&D, and Science Education

\$12,916,000

An increase of 0 FTE and \$6,474,000 is requested above the base, for a total of \$12,916,000, and 13 FTE in this subactivity.

■ NOAA requests an increase of 0 FTE and \$6,474,000 to restore funding for High Performance Computing and Communication to its prior level of 13 FTE and \$12,916,000. These funds will be used to make major improvements in the NOAA's ability to forecast the Nation's weather and climate, to model ecosystems and the ocean, and to disseminate environmental information. Improvements in the accuracy and timeliness of NOAA's



High-performance computing enables improved hurricane forecasts

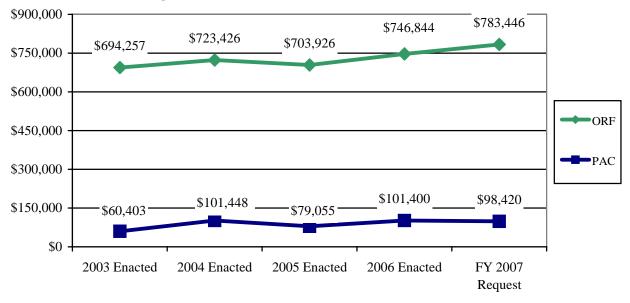
short-term weather warnings, seasonal forecasts, and regional and global climate predictions are heavily dependent on major advances in high-end computing power, advanced information technology, and the availability of environmental data and information.



# **National Weather Service**

(Dollars in Thousands)	FY 2006 Enacted	FY 2007 Base	Program Changes	Total Request		
National Weather Service Operations, Research and Facilities (ORF)						
Operations and Research Systems Operation & Maintenance (O&M)	\$661,780 85,064	\$659,202 86,799	\$28,654 8,791	\$687,856 95,590		
Total, National Weather Service - ORF	746,844	746,001	37,445	783,446		
Other National Weather Service Accounts Total, National Weather Service - PAC Total, National Weather Service - Other	101,400 0	92,355 0	6,065 0	98,420 0		
GRAND TOTAL NATIONAL WEATHER SERVICE (Direct Obligations)	\$848,244	\$838,356	\$43,510	\$881,866		
Total FTE	4,651	4,651	9	4,660		

# **Budget Trends, FY 2003 – 2007** (dollars in thousands)



ORF: Operations, Research & Facilities

PAC: Procurement, Acquisition & Construction

www.nws.noaa.gov

# **National Weather Service**



The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters, and ocean areas for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other government agencies, the private sector, the public, and the global community.

The United States is one of the most severe-weather prone countries on Earth. Each year, Americans cope with an average of 10,000 thunderstorms, 5,000 floods, 1,000 tornadoes, as well as 6 deadly hurricanes. Some 90% of all Presidentially-declared disasters are weather related, causing approximately 500 deaths per year and \$14 billion in damage. According to the American Meteorological Society, weather is directly linked to public safety and about one-third of the U.S. economy (about \$3 trillion) is weather sensitive.

More and more sectors of the U.S. economy recognize the impacts of weather, water, and climate on their businesses, and are becoming more sophisticated at using weather, water, and climate information to make better decisions. To meet this growing demand for information and to improve the timeliness and accuracy of warnings for all weather-related hazards, the NWS will continue to enhance observing capabilities, improve data

assimilation to effectively use all the relevant data NWS and others collect, improve collaboration with the research community, make NWS information available quickly, efficiently, and in a useful form (e.g., the National Digital Forecast Database) and include information on forecast uncertainty to help customers make fully informed decisions.

With about 4,700 employees in 122 weather forecast offices (WFO), 13 river forecast centers, 9 national centers and other support offices around country, NWS provides a national infrastructure to gather and process data worldwide from the land, sea, and air. This infrastructure enables data collection using technologies such as Doppler weather radars, satellites operated by NOAA's National Environmental Satellite, Data, and Information Service (NESDIS), data buoys for marine observations, surface observing systems, and instruments for monitoring space weather and air quality. These data feed sophisticated environmental prediction models running on high-speed supercomputers. Our highly trained and skilled workforce uses powerful workstations to analyze all of these data to issue climate, public, aviation, marine, fire weather, air quality, space weather, river and flood forecasts and warnings around-the-clock. A high-speed communications hub allows for the efficient exchange of these data and products between NWS components, partners and customers. NWS forecasts and warnings are rapidly distributed via a diverse dissemination infrastructure including NOAA Weather Radio. Finally, customer outreach, education, and feedback are critical elements to effective public response and improvements to NWS services.

The FY 2007 President's Budget Request supports the funding and program requirements necessary to address established NOAA strategic goals and sets NWS on a path to achieve its vision: Produce and deliver forecasts that can be trusted; use cutting-edge technologies; provide services in a cost-effective manner; strive to eliminate weather-related fatalities; and improve the economic value of weather, water, and climate information.

### **FY 2007 Budget Summary**

NOAA requests total of \$783,446,000 million and 4,606 FTE to support the continued and enhanced operations of the National Weather Service. The total includes \$24,754,000 for Adjustments to Base, \$37,445,000 million for Program Increases, and \$25,597,000 in Terminations.

### **ADJUSTMENTS TO BASE:**

NOAA requests a net increase of \$24,754,000 and 0 FTE to fund adjustments to base across all accounts in the National Weather Service activities. With this increase program totals will fund the estimated FY 2007 Federal pay raise of 2.2 percent and annualize the FY 2006 pay raise of 3.1 percent. Program totals will provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration.

NWS also requests the following transfers between line offices or appropriations for a net change to NOAA of zero:

- \$2,291,000 is transferred from the National Tsunami Hazard Mitigation Program to the Strengthen the U.S. Tsunami Warning Network Program Planning Activity (PPA) within the Local Warnings and Forecasts Line Item. This transfer has no net effect on overall NWS or NOAA funding and was done simply to consolidate all NWS Tsunami funding into one PPA.
- \$3,000,000 is transferred from the Local Warning and Forecasts line to benefit the Oceanic and Atmospheric Research (OAR) Competitive Research Program.
- \$21,500,000 is transferred from the National Data Buoy Center to the Local Warnings and Forecasts base and Alaska Data Buoy PPAs within the Local Warnings and Forecasts line item.
- \$5,800,000 is transferred from the National Hurricane Center to the Central Forecasts Guidance PPA within the Central Forecasts Guidance line item.

### NWS – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2007:

NOAA requests a net increase of \$37,445,000 and 9 FTE over the FY 2007 base for a total request of \$783,446,000 and 4,606 FTE. These changes are summarized at the subactivity level below and to be concise, do not include descriptions below \$1,000,000. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2007 Technical Budget.

### **Operations and Research**

\$687,856,000

A net increase of \$28,654,000 and 9 FTE above the base is requested in the Operations and Research subactivity, for a total of \$687,856,000 and 4,424 FTE.

**Local Warnings and Forecasts:** \$ 28,654,000 and 9 FTE in net increases above the base, for a total of \$636,793,000 and 4,125 FTE, are requested under the Local Warnings and Forecasts line item of the Operations and Research subactivity.

• NOAA requests 0 FTEs and \$1,400,000 to operate and maintain the seven new weather data buoys funded/deployed under the FY 2005 Hurricane Supplemental Appropriation. These buoys support enhanced real time hurricane data observations and storm monitoring in the Caribbean, Gulf of Mexico, and the Atlantic Ocean to support the NOAA hurricane warning and forecast mission. The FY 2005 Hurricane Supplemental provided one-time funding to procure and deploy these buoys. This program adjustment requests the funding required to support the long-term operation and maintenance of these platforms. This investment is required for NOAA's implementation of the Integrated Ocean Observing System (IOOS) as the coastal and open ocean

component of the Global Earth Observation System of Systems (GEOSS). Combined with other like-identified IOOS investments across NOAA, it is part of

NOAA's strategy to provide initial benefits of an integrated ocean observing system, focusing observational enhancing key capabilities throughout NOAA, and our ability to provide customers with enhanced coastal data and information. The seven newly installed data buoys, consisting of one 3-meter, two 6-meter, two 10meter, and two 12-meter buoys, require annual maintenance and shore-side operating/infrastructure



**NOMAD** Weather Buoy

support to maintain reliable data output. Funds will be used to provide: field service and maintenance; shore-side operation/infrastructure support; and to maintain spare equipment/buoy to support field maintenance strategy.

NOAA requests \$12,360,000 and 4 FTE to strengthen the tsunami warning program. response to the 2004 Indian Ocean Tsunami. the Administration U.S. proposed expanding the Warning Program Tsunami protect U.S. lives and property along all coasts (Pacific, Gulf of Mexico, Atlantic and the Caribbean). In order continue to the Administration's commitment to strengthening the U.S. Tsunami Warning Program and mitigate a similar seismic/tsunami event in the



Crew servicing a Tsunami buoy

U.S., NOAA needs to build upon the foundation laid in FY 2005 and FY 2006 and continue to accelerate and improve its: (1) Tsunami Hazard Assessment Programs (including comprehensive coastal US risk assessments/inundation mapping, modeling and forecasting efforts); (2) Tsunami Warning Guidance Programs (including 24/7 tsunami detection and warning systems and the dissemination of accurate and timely tsunami forecasts and warnings); and (3) Tsunami Mitigation Programs (including community-based emergency response plans) and public education/awareness (TsunamiReady communities and inundation/evacuation mapping). Funds will be used to operate and maintain the newly expanded DART systems, new sea-level monitoring stations, the upgraded

local seismic networks supporting the West Coast /Alaska Tsunami Warning Center (WC/ATWC) and the Richard H. Hagemeyer Pacific Tsunami Warning Center (PTWC), and to operate both the WC/ATWC and PTWC as 24/7 Operation Centers.

NOAA requests \$3,500,000 and 5 FTE to transfer the Wind Profilers from research to operations. Wind Profilers, vertical looking radars, installed in

1988, are used for a variety of analytical forecasting tasks. Wind profile data are used as for input numerical (computer) weather models that predict clouds, precipitation, and temperature. The data also provide important indicators of where severe weather such as tornadoes and winter storms mav form.



**NOAA Wind Profiler** 

requiring weather advisories, watches, or warnings. Weather forecasters also use wind profiler data for issuing aviation Significant Meteorological (SIGMET) advisories and wildfire predictions. The NOAA Profiler Network (NPN) must be upgraded to operate at a different frequency because of interference with signals from new search and rescue (SAR) satellites expected to launch by the European Space Agency in FY 2006. Currently, the SAR beacons and the NPN operate at the same frequency. Consequently, the SAR beacon will interfere with NPN wind profiling radars whenever a satellite is overhead. The NPN wind profile information improves NWS operational warning and watch performance capability. Performance statistics indicate that tornado, winter storm, severe storm, flash flood forecasts and warnings, and aviation weather and fire weather warnings for NWS WFOs with wind profilers are more accurate and are able to provide longer warning lead-times. In FY 2007 NWS will: initiate engineering design and development contract for new frequency compliant transmitters; coordinate with data users the development of contingency plans for interference issues that may arise; and, provide operations and maintenance support for the current Profiler network.

• NOAA Requests \$1,200,000 and 0 FTE to expand the multi-year effort to improve aviation weather services. This requested increase will enable procurement and fielding of 75 additional water vapor sensors as part of an Integrated Upper Air Observing system, and transition additional products to a digital environment. Today, weather accounts for 70% of all air traffic delays

within the U.S. National Airspace System (NAS), resulting in a \$10B impact to the U.S. economy, \$4B of which the Federal Aviation Administration (FAA) has determined is preventable. The Aviation Weather program must continue to implement projects and training opportunities that improve both the accuracy of weather information and the way in which weather information is utilized. Pilots, controllers and flight planners require products in digital formats to facilitate and expand their use in the cockpit and



Mounted flush on the side of 25 UPS (B-757) aircraft, the air sampler produces little in-flight drag.
(Photo courtesy UPS)

to convey forecast specifics graphically lending to better, more informed decision making. The Aviation Program must be prepared to enable the NWS to transition and sustain FAA Research and Development (R&D) efforts in aviation weather that are valued over \$24M/year. In addition, the Aviation Program is supporting the Joint Planning and Development Office (JPDO) effort to develop the Next Generation Air Transportation Systems (NGATS), with the Department of Commerce (DOC) leading a 5-agency [Department of Defense (DOD), Department of Transportation (DOT), Department of Homeland Security (DHS), National Aeronautics and Space Administration (NASA), and DOC] Weather Integrated Process Team.

NOAA requests \$2,500,000 and 0 FTE the Air Quality **Forecasting** Program. This program provides air quality forecast guidance with implementation of NOAA's Air Quality Forecast capability. This increase will be used for nationwide deployment of ozone forecasts in FY 2009, and for initial PM forecast capability in FY 2012. The air quality forecast capability for next-day ground-level ozone. first deployed operationally in September 2004 over the Northeastern U.S., and now covering Eastern US, will be extended through phased development and testing nationwide in FY 2009.



• NOAA requests \$3,199,000 and 0 FTE for the Space Environment Center. SEC provides real-time monitoring and forecasting of solar and geophysical events, conducts research in solar-terrestrial physics, and develops techniques for forecasting solar and geophysical disturbances. SEC provides services to a broad user community of government agencies, industries, public institutions, and private individuals involved in satellite operation, space exploration, radio navigation, high-altitude polar flights, high-frequency communications, remote intelligence gathering, long-line power and data transmissions, and geophysical exploration.



**Solar Flare** 

- NOAA requests \$890,000 and 0 FTE for the Cooperative Observer Program. This request funds Operations and Maintenance (O&M) support for NOAA legacy Cooperative Observer program. This program provides observational meteorological data in near real-time to support forecast, warning and other public service programs of the NWS. More than 11,000 volunteers take observations on farms, in urban and suburban areas, national parks, seashores, and mountaintops and the data that are collected are truly representative of where people live, work and play.
- NOAA requests \$2,457,000 and 0 FTE for U.S. Weather Research Program. This request will accelerate hurricane research, air quality research for particulate matter forecasts, and to expand The Observing System Research and Predictability Experiment (THORPEX). The hurricane research activities include improving forecasts of hurricane intensity at landfall.
- NOAA requests \$1,098,000 and 0 FTE for the Advanced Hydrological Prediction Services (AHPS). This funding allows continued nationwide implementation of AHPS, with deployment at an additional 309 forecast points in these areas. AHPS information comes from the combined use of remote sensing, data automation and advanced computer modeling to analyze river data, and create graphical



1997 Ohio Flood

displays of flood probability forecasts, including flood-forecast maps, pinpointing areas where flooding may occur. The FY 2007 budget also supports extramural

partnerships to carry out operationally-oriented hydrologic research, deployment of new flash-flood forecasting tools, and introduction of more effective river forecasting models.

# **Systems Operation & Maintenance (O&M)**

\$95,590,000

A net increase of \$8,791,000 and 0 FTE above the base is requested in the Systems Operation & Maintenance subactivity, for a total of \$95,590,000 and 182 FTE.

NOAA requests an increase of \$2,500,000 and 0 FTE, to implement a telecommunications network solution that resolves an existing single-point-of-failure associated with the NWS Telecommunications Gateway Critical Infrastructure **Protection** (NWSTG-CIP). This investment will ensure uninterrupted delivery of critical meteorological data necessary for the protection of life and property, and the economic well being of the Nation. The NWSTG-CIP is the hub for all NWS/NOAA weather, water and climate data and information, and has been identified as an essential government resource in Presidential Decision Directive - 67 Enduring Constitutional Government and Continuity of Government Operations. The geographically disparate backup system will be connected to the NWSTG primary and user community through a telecommunications network. Funds will be used for operations and maintenance (O&M) in FY 2007 which includes annual recurring telecommunications costs for switching all NWSTG circuits through a switch located at the Local Exchange Carrier (LEC) central office. The Department of Commerce Chief Information Office (CIO) mandated that the connectivity between the NWSTG and NWSTG-CIP eliminates all single-points-offailure. In order for this to transpire, a network was designed to bypass the LEC central office. Without full network connectivity, the NWSTG will remain a single point of failure, risking the delivery of critical meteorological data necessary for the protection of life and property, vital to the economic well being of the Nation.

NOAA requests \$3,461,000 and 0 FTE for Advanced Weather Interactive **Processing System** (AWIPS). This request will fund operations continued maintenance for the network of 169 fielded systems. AWIPS integrates satellite and NEXRAD Doppler weather radar data and provides to the local field forecaster capabilities to significantly improve forecasts and warnings.



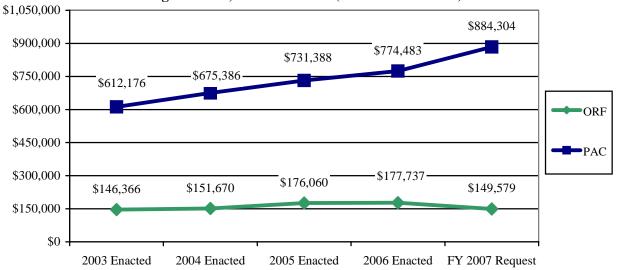
• NOAA requests \$2,830,000 and 0 FTE for NEXRAD. This request will restore funding necessary for continued operations and maintenance for the network of 123 NEXRAD systems. NEXRAD systems are critical for real-time observations and forecasts of severe weather events, including tornadoes, heavy precipitation, and hurricanes.



# **National Environmental Satellite, Data, and Information Service**

(Dollars in Thousands)	FY 2006 Enacted	FY 2007 Base	Program Changes	Total Request		
National Environmental Satellite, Data, and Information Service Operations, Research and Facilities (ORF)						
Environmental Satellite Observing Systems NOAA's Data Centers & Information Services	\$106,769 70,968	\$99,515 45,079	(\$1,845) 6,830	\$97,670 51,909		
Total, NESDIS - ORF	177,737	144,594	4,985	149,579		
Other National Environmental Satellite, Data, and Information Total, NESDIS - PAC Total, NESDIS - Other	774,483	771,848 0	112,456 0	884,304 0		
GRAND TOTAL NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE (Direct Obligations)	\$952,220	\$916,442	\$117,441	\$1,033,883		
Total FTE	832	832	0	832		

# Budget Trends, FY 2003 - 2007 (dollars in thousands)

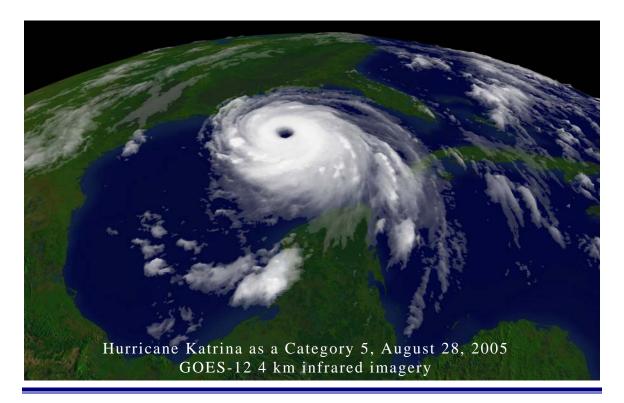


ORF: Operations, Research & Facilities

PAC: Procurement, Acquisition & Construction

www.nesdis.noaa.gov

# **National Environmental Satellite, Data, and Information Service**



The NOAA National Environmental Satellite, Data, and Information Service (NESDIS), is responsible for managing all aspects of remotely gathered environmental data. This includes procurement, launch, operation, product development, and product distribution for the Nation's civil operational environmental satellites. Additionally, NESDIS manages the NOAA environmental data collections, and disseminates data and information to meet the needs of users in commerce, industry, agriculture, science and engineering, as well as federal, state, and local governments.

Through NESDIS, NOAA manages the Nation's operational environmental satellite systems; takes in, processes, and distributes satellite-derived products and services; and archives and provides global environmental meteorological, oceanographic, solid-earth geophysics, and solar-terrestrial data. NOAA's polar-orbiting satellites work together with geostationary satellites stationed at the equator over the Americas to provide daily global data on weather conditions, atmospheric temperature structure, volcanic activity, sea surface temperature, forest fires, ozone levels, hurricanes, and typhoons. These

satellites monitor storms and support NOAA's National Weather Service and Federal and local emergency management agencies, enabling them to provide advance warnings of emerging severe weather such as hurricanes, tornadoes, flash floods, winter storms, wildland fires, and floods. The satellites and the products and services NESDIS provides are essential to protect human life, property, and critical infrastructure. In support of the Nation's environmental data needs, NESDIS gathers global data about the oceans, Earth, air, space, the sun, and their interactions to describe and predict the state of the physical environment. NOAA's data centers archive the data which are necessary for scientists and industry to fully understand Earth's systems and long-term climatic, oceanographic, and geophysical effects on the environment and the economy. Through the Office of Space Commercialization, NESDIS manages the commercialization of space activities for the Federal government. NESDIS supports the President's priorities in climate sciences, ocean and coastal management, energy, and forest resources protection by developing products from its satellite and data archives to meet user needs. As an important part of this support, NESDIS seeks opportunities to transition research satellite capabilities to operational products and services.

# FY 2007 Budget Summary

NOAA requests a total of \$149,579,000 and 717 FTE to support the continued and enhanced operations of the National Environmental Satellite, Data, and Information Service. The total includes \$2,075,000 for Adjustments to Base, \$4,985,000 for Program Increases, and \$35,218,000 in Terminations.

#### **ADJUSTMENTS TO BASE:**

NOAA requests a net increase of \$2,075,000 and 0 FTE to fund adjustments to base across all accounts in the National Environmental Satellite, Data, and Information Service's activities. With this increase program totals will fund the estimated FY 2007 Federal pay raise of 2.2 percent and annualize the FY 2006 pay raise of 3.1 percent. Program totals will provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration.

# **NESDIS – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2007:**

NOAA requests a net increase of \$4,985,000 over the FY 2007 base for a total request of \$149,579,000. These changes are summarized at the sub-activity level below and to be concise, do not include descriptions below \$1,000,000. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2007 Technical Budget.

A net decrease of \$1,845,000 and 0 FTE is requested in the Environmental Satellite Observing Systems subactivity, for a total of \$97,670,000 and 414 FTE.

- **Satellite Command and Control:** \$800,000 and 0 FTE in net decreases, for a total of \$43,788,000 and 179 FTE, are requested under the Satellite Command and Control line item. This decrease reflects reduced operational support for non-NOAA satellites to offset increases for higher priority core programs.
- **Product Processing and Distribution:** \$400,000 and 0 FTE in net decreases, for a total of \$27,270,000 and 126 FTE, are requested under the Product Processing and Distribution line item. This decrease reflects reduced operational support for non-NOAA satellites to offset increases for higher priority core programs.
- **Product Development, Readiness & Application:** \$645,000 and 0 FTE in net decreases, for a total of \$24,771,000 and 103 FTE, are requested under the Product Development, Readiness & Application line item.
  - NOAA requests a decrease of \$400,000 and 0 FTEs for Product Development, Readiness and Application activities. This decrease reflects reduced operational support for non-NOAA satellites to offset increases for higher priority core programs.
  - \*\*NOAA requests an increase of \$737,000 and 0 FTEs for Coral Reef Monitoring. NOAA requests an increase of \$737,000 and 0 FTE for a total request of \$737,000 to carry out the coral reef monitoring activities. These resources support the development and maintenance of operational satellite products aimed at near real-time observation, monitoring and forecasting of environmental conditions conducive to



**Coral Reef** 

deterioration of coral reef health, often resulting from coral reef bleaching events. These products are necessary to comply with Executive Order 13089, the Coral Reef Conservation Act of 2000, and the U.S. Ocean Action Plan, which all direct Federal agencies to use programs and authorities to protect and enhance coral reef ecosystems. This funding enables production of models to integrate satellite / in situ measurements with the efforts of the Coral Reef

Ecosystem Integrated Observing System within other NOAA line offices. The Coral Reef Watch Program is a collaborative effort under the auspices of NOAA's Coral Reef Matrix Team.

• NOAA requests a decrease of \$982,000 and 0 FTE for the Global Winds Demonstration Project. The proof of concept for the Global Winds Demonstration Project was completed in FY 2006, and this program will be phased out.

### **NOAA's Data Centers & Information Services**

\$51,909,000

A net increase of \$6,830,000 and 0 FTE above the base is requested in the NOAA Data Centers and Information Services subactivity, for a total of \$51,909,000 and 303 FTE.

- NOAA requests an increase of \$8,697,000 and 0 FTE, for a total request of \$38,017,000 for the Archive, Access, and Assessment program to carry out data archive, access and assessment activities. This additional funding will be used to maintain critical operations at NOAA's National Data Centers, to ensure timely and quality service for more than 50,000 users per year. Users from the private sector, academia and government rely on NOAA data centers for access to environmental records ranging from oceanographic and geophysical data to atmospheric and solar-terrestrial information.
  - NOAA requests a decrease of \$1,867,000 and 0 FTE for a total request of \$4,063,000 for the Climate Database Modernization Program (CDMP) to partially offset increases in other, high priority areas. Through the CDMP contractors, NOAA and the NCDC manage the conversion of historical data records to electronic format and accessibility via the Internet. This funding will support basic operational efforts such as processing and keying incoming NOAA records, image access, subscription services and accounts receivable. The current CDMP contract is in its final year and the follow-on contract will be negotiated or competed for competitive pricing.

[Page intentionally left blank]

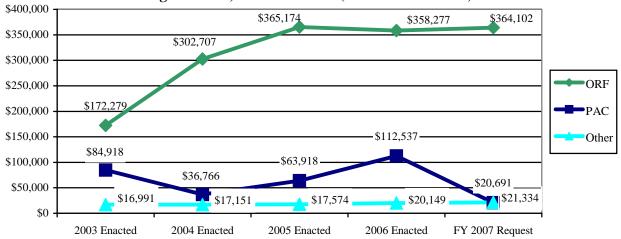


# **Program Support**

(Dollars in Thousands)	FY 2006 Enacted	FY 2007 Base	Program Changes	Total Request			
Program Support Operations, Research and Facilities							
Corporate Services	\$176,574	\$178,180	\$13,746	\$191,926			
NOAA Education Program	37,514	15,212	\$4,100	\$19,312			
Facilities	10,849	11,927	\$11,082	\$23,009			
NOAA Marine and Aviation Operations	133,341	122,895	\$6,960	\$129,855			
Total Program Support - ORF	358,278	328,214	35,888	364,102			
Other Program Support Accounts							
Total Program Support - PAC	112,537	35,542	(14,851)	20,691			
Total Program Support - Other	20,149	21,334	0	21,334			
GRAND TOTAL PROGRAM SUPPORT (Direct Obligations)	\$490,964	\$385,090	\$21,037	\$406,127			
Total FTE	1,991	1,991	16	2,007			

ORF: Operations, Research & Facilities

# Budget Trends, FY 2003 - 2007 (dollars in thousands)



PAC: Procurement, Acquisition & Construction

Other: NOAA Corps Commissioned Officers Retirement



www.corporateservices.noaa.gov/~noaa/

# **Program Support**



Program Support consists of Corporate Services, Facilities, and the Office of Marine and Aviation Operations (OMAO). NOAA Program Support provides the administrative, financial, and infrastructure services that are essential to the successful performance of NOAA's mission. In addition to NOAA-wide policy formulation and direction, the Program Support activities specifically support the *people* of NOAA, ensuring that they have the proper work environment, the necessary tools and equipment, and the vital personnel and finance services which, in turn, allow them to provide the finest possible service to the American people, our economy and our environment. Program Support through OMAO provides data collection at sea and in the air to support NOAA program requirements.

### **CORPORATE SERVICES**

The Under Secretary and Associate Offices (USAO), including the Office of General Counsel, provide the top leadership and management for NOAA. USAO formulates and executes policies and programs for achieving the objectives of NOAA; develops, plans, and coordinates major program efforts; exercises delegated authority in committing NOAA to courses of action; and represents NOAA in executive level liaison with other federal agencies, the Congress, and private industry. The Under Secretary, Assistant Secretary, and Deputy Under Secretary comprise the top level of NOAA leadership. The Associate Offices, more commonly known as NOAA's Staff Offices, are described below.

Office of Public, Constituent, and Intergovernmental Affairs (OPCIA) provides advice and counsel on media, constituent, and intergovernmental relations. The OPCIA consists of four elements, each addressing a unique audience: Public Affairs (media relations), Constituent Affairs (non-government organizations), Intergovernmental Affairs (state, tribal, territorial, regional, and local government), and Outreach.

The Office of Education and Sustainable Development (OESD) is dedicated to achieving success on NOAA's strategic cross-cutting priorities of promoting environmental literacy and to developing, valuing, and sustaining a World-class workforce. OESD consults within NOAA to improve coordination across Line, Program, and Staff Offices, while promoting NOAA services and products, and their benefits to the public. OESD also implements targeted education programs on behalf of the Agency. Such activities include administration of the Ernest F. Hollings Undergraduate Scholarship Program, enacted by Congress in the Consolidated Appropriation Act 2005, and development of Education Partnership Program with Minority Serving Institution (EPP/MSI). Both of these programs are specifically focused on increasing education and training opportunities for individuals pursuing NOAA-related fields of study with the goal of encouraging students to pursue applied research and education in atmospheric and oceanic sciences, and science education. The EPP program funding also directly supports the development of NOAA-related research capability in MSIs.

Office of Legislative Affairs (OLA) serves as the primary liaison for NOAA with the Members and staff of Congress. The Office is also responsible for the planning, direction, and coordination of legislative programs that are of immediate concern to the Office of the Under Secretary.

Office of International Affairs (OIA) plans and coordinates NOAA's international programs and carries out, as directed by the Office of the Under Secretary, tasks of special interest related to international activities. The Deputy Assistant Secretary for International Affairs exercises a leadership role in establishing policies, guidelines, and procedures for NOAA's international programs.

Office of the Federal Coordinator for Meteorology (OFCM) establishes procedures for systematic and continuing review of national basic and specialized meteorological and oceanographic requirements for services and supporting research, and brings federal agencies concerned with international activities and programs in meteorological and oceanographic programs into close consultation and coordination.

Office of General Counsel (OGC) provides legal advice and counsel for all matters arising in connection with the functions of NOAA, except for legal issues common to all Department bureaus, which are handled by the Department of Commerce General Counsel.

The NOAA Office of the Chief Administrative Officer (OCAO) provides management and support services essential to NOAA's program mission success. The OCAO is responsible for NOAA's facility management program, including capital facilities investment planning and management; facility construction and maintenance; and, real and personal property management. The OCAO also manages NOAA's technology and deemed export control program, and oversees audit coordination, Freedom of Information Act compliance, executive correspondence management and civil rights protection for all NOAA employees. These programs provide basic services essential for NOAA to achieve its mission.

The Office of the Chief Financial Officer (CFO) serves as the principal financial manager for the NOAA organization with approximately \$7 billion in capital assets. The CFO's office, containing Budget and Finance functions, has primary responsibility for budget formulation and execution, resource management, financial systems development and financial management. The CFO Act of 1990 requires the CFO's Office to provide the leadership necessary for NOAA to obtain a yearly unqualified opinion in the audit of its consolidated financial statements. Under the direction of the CFO, the Budget and Finance Offices perform methods and procedures analysis and systems and organizational research to support senior management in making executive decisions to ensure operational efficiencies within NOAA.

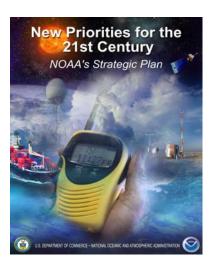
The Office of Acquisition and Grants (OAG) provides support to NOAA line offices with planning, solicitation, award, administration and closeout of acquisitions, grants, and cooperative agreements. It works closely with mission partners (universities, individuals, non-profit and for-profit organizations, as well as state, tribal, and local government entities).

The Office of the Chief Information Officer and High Performance Computing and Communication (OCIO & HPCC) supports all NOAA and DOC programs and missions by providing information technology (IT) policy, planning and management. The Office provides oversight of the implementation of NOAA's IT program as required under the Clinger-Cohen Act, the Federal Information Management Security Act (FISMA), and the Paperwork Reduction Act; other statutory and legal requirements; and Department of Commerce policies. The Office also provides management of NOAA's Homeland Security activities, enterprise network services, the NOAA IT Center, and IT security for NOAA's systems; administration of the IT Capital Planning and Investment Control process; and oversight of High Performance Computing and Communications activities.

The Office of Human Resources (HR) services NOAA's most important asset - its people. HR provides the policies, programs, and processes that facilitate the recruitment, hiring, development, and retention of a diverse, highly skilled, motivated, and effective workforce capable of accomplishing NOAA's mission.

The Office of Program Analysis and Evaluation (PA&E) provides independent and objective analysis in support of corporate management. This Office makes NOAA more efficient and effective in its programmatic decision making process.

The Office of Program Planning and Integration (PPI) is responsible for overseeing NOAA's strategic planning programs, mandated by GPRA. It monitors and tracks accomplishment of goals and objectives stated in the NOAA strategic plan. PPI ensures that NOAA stays aligned with the stated mission and legislative mandates. PPI is responsible for managing the NOAA-wide planning cycle and for producing its outputs. These include the annual updates to the NOAA Strategic Plan and release of the Annual Guidance Memorandum (AGM), which articulates yearly investment priorities. PPI designs planning guidance for NOAA programs, oversees their planning processes, and monitors and evaluates program implementation.



### **FACILITIES**

The Facilities Program provides program direction and oversight to NOAA's major construction program and has been the focal point for facility master planning; project planning formulation and development; and project management oversight to support critical NOAA mission requirements. NOAA's capital assets, totaling more than 400 owned facilities are valued at nearly two billion dollars. As the NOAA-owned facilities continue to age, investments in maintenance, repairs and modernization must remain a priority. The Facilities Program provides responsibility for policy development and guidance, long-term facility master planning, construction, execution and management of the total project life-cycle for facility construction and modernization projects--including environmental/safety projects.

### OFFICE OF MARINE & AVIATION OPERATIONS (OMAO)

### **Marine Operations**



Launch of HENRY B. BIGELOW (FSV 2), July 8, 2005



NOAA divers surveying whaling shipwrecks at Pearl and Hermes Atoll in NW Hawaiian Islands.

OMAO operates NOAA's fleet of vessels and provides ship support to NOAA programs through outsourcing, operational readiness and maximum platform utilization in support of NOAA's at-sea data collection requirements. OMAO provides centralized management for operations, fleet planning, and maintenance support. OMAO also is responsible for NOAA's fleet safety, diving, and Teacher-at-Sea program. NOAA Corps officers, crews, and scientists with at-sea duty are trained and certified through OMAO. NOAA's vessels support nautical charting, fisheries research, marine environmental assessments, coastal-ocean circulation studies, and oceanographic and atmospheric research. The 20 active ships will perform approximately 4,650 operating days in FY 2007 in support of NOAA programs. In addition, FSV3 will be delivered to NOAA in FY 2007, and will prepare for operations in FY 2008. The vessels operate on both the East and West Coasts. OMAO's Marine Operations Center (MOC) has Atlantic and Pacific regional offices located in Norfolk, Virginia, and Seattle, Washington, respectively, and the vessels are assisted by a small support staff at the home port of most ships. The centers provide maintenance, stores, supplies and repair facilities for the vessels.

The NOAA Commissioned Corps is the nation's seventh and smallest uniformed service. Corps officers support the fleet and NOAA Line Offices. Marine Services funds the majority of the NOAA Corps payroll. The officers of the NOAA Corps command NOAA's research and survey vessels, fly NOAA's "hurricane hunter" and environmental monitoring aircraft, support field operations, and serve in a variety of technical and management positions throughout the agency.

# **Aviation Operations**



NOAA's Hurricane Hunter, Gulfstream IV (G-IV)



NOAA's Hurricane Hunter, P-3 with weather radar underneath

OMAO's Aircraft Operations Center (AOC), located at MacDill Air Force Base in Tampa, Florida, ensures the availability and readiness of NOAA's uniquely configured aircraft. AOC provides centralized management of a fleet of 12 aircraft used as observation platforms equipped with comprehensive data-collection systems in support of missions related to the Earth's environment, coastal and marine resources, and severeweather. In FY 2007, Aircraft Services will provide approximately 1,975 flight hours in support of NOAA missions. NOAA aircraft are fitted with specialized instrumentation for airborne research, airborne data collection, and observation. Both WP-3D Hurricane Hunter aircraft and the G-IV high-altitude jet will be mission-ready with instruments and personnel for hurricane surveillance, reconnaissance and research during the hurricane season from June 1 to December 1. In the FY 2006 Hurricane Supplemental, NOAA received \$9,000,000 to acquire and modify a third P-3. The mission of the third P-3 includes air chemistry and air quality research, remote sensing, oceanographic research and other missions not involving flights in severe weather. The G-IV will also be mission-ready with instruments and personnel to collect data for West Coast winter storm predictions from January 15 to April 1. The Jet Prop Commander and Shrikes will be mission-ready with equipment and personnel for snow radiation surveys, flood forecasts, water management, and other background surveys throughout the year in Alaska and Northern United States. The Twin Otters will continue to operate throughout the coastal Atlantic, Pacific, and Gulf of Mexico surveying living marine resources and conducting remote sensing missions. NOAA's premier remote sensing aircraft, the Citation II, will continue to fly throughout the coastal United States responding and collecting damage assessment imagery, testing new remote sensing technologies, and performing coastal mapping missions.

# **NOAA Corps Retirement Pay (Mandatory)**

The retirement system for the uniformed services provides a measure of financial security after release from active duty for service members and their survivors. It is an important

factor in the choice of a career in the uniformed services and is mandated by Federal statutes under Title 10, United States Code. NOAA transfers retirement pay funds to the Coast Guard, which handles the payment function for retirees and annuitants. Health care funds for non-Medicare-eligible retirees, dependents, and annuitants are transferred to the U.S. Public Health Service, which administers the health care program.

### **FY 2007 Budget Summary**

NOAA requests a total of \$406,127,000 and 2,008 FTE for NOAA Program Support. The total includes \$3,115,000 for Adjustments to Base, \$21,037,000 for Program Increases, and \$108,989,000 in Terminations.

### **ADJUSTMENTS TO BASE:**

NOAA requests a net increase of \$6,535,000 and 0 FTE to fund adjustments to base across all accounts in Program Support activities. With this increase program totals will fund the estimated FY 2007 Federal pay raise of 2.2 percent and annualize the FY 2006 pay raise of 3.1 percent. Program totals will provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration.

## **Corporate Services**

NOAA requests an adjustment to base for a net increase of \$1,695,000 and 0 FTE, including increases to cover costs for NOAA wide services and agency management, offset by a decrease of \$80,000 to partially fund a NOAA Corps Officer position in OMAO that benefits the Office of Program Planning and Integration.

### **Facilities**

NOAA requests an adjustment to base transferring \$1,000,000 from WFO Construction funding to support NOAA Facility Planning requirements.

### **OMAO**

NOAA requests a net increase of \$3,840,000 and 0 FTE for ATBs in OMAO which includes increases for pay raises, expenses, fuel and data acquisition, Fleet Planning and Maintenance and for Aircraft Services. OMAO also requests a transfer of \$1,120,000 from various Line Offices in order to centrally fund and manage NOAA Corps Officers.

This request will centrally fund and manage 16 NOAA Corps Officers to support the goals and cross-cutting priorities identified in the NOAA Strategic Plan and to support several staff offices. Program managers have identified the need for NOAA Corps officers to be detailed to their programs. These officers bring diverse field and staff experience to programs. Through the regular rotation process, an officer develops

experience in more than one Line or Staff Office and at various locations within that organization. Program managers also need the responsiveness and flexibility inherent in a Commissioned Corps system. Officers can be assigned, on very short notice, to a different geographical location or program to meet the needs of the agency.

With these increases, program totals will fund the estimated FY 2007 Federal pay raise of 2.2% and annualize the FY 2006 pay raise of 3.1%. The FY 2007 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.

# **Program Support – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2007:**

NOAA requests a net increase of \$35,888,000 and 9 FTE for a total program of \$364,102,000 in FY 2007 to support continued and enhanced operations of NOAA's mission support personnel and activities. Detail numeric breakouts are located in Chapter 7, *Special Exhibits* and more detailed descriptions are found in the NOAA FY 2007 Technical Budget.

# **Corporate Services**

\$191,926,000

NOAA request an increase of \$13,746,000 and 2 FTE for the Corporate Services. This increase of \$2,737,000 and 2 FTE will support the USAO with dedicated, on-site legal support for NOAA's activities in the Pacific Island Region. This request also supports an increase of \$2,050,000 and 0 FTE for the Office of the Chief Information Officer. NOAA also requests an increase of \$8,959,000 and 0 FTE to maintain current service levels of direct administrative, technical, human resources and financial support to NOAA Staff Offices to the line offices, and to provide funding for the transfer of the guard services contracts from the DOC Working Capital Fund to direct NOAA funding.

**Education** \$19,312,000

NOAA requests an increase of \$4,100,000 and 0 FTE for the Office of Education, to support the Hollings and Nancy Foster Scholarship Programs. This funding will continue to improve coordination of NOAA's higher education activities directed at strengthening the pool of candidates for a future NOAA workforce. This funding will also enhance NOAA's higher education activities and promote development of a highly trained, technologically capable workforce. For FY 2007, NOAA is requesting these programs as dedicated line items instead of an across the board reduction to all NOAA programs.

The FY 2007 request for the education program includes \$1,000,000 to support JASON. The JASON Foundation for Education and the Institute for Exploration / Immersion Institute works toward the development of 4<sup>th</sup> through 9<sup>th</sup> grade multi-disciplinary, oceans related products in support of the NOAA Education Plan and priorities identified by the NOAA Education Council.

Facilities \$23,009,000

NOAA request an increase of \$9,395,000 and 0 FTE, for a total of \$18,963,000, to support NOAA's Facilities Management and Modernization. This request provides crucial funding for new planned facility repair and maintenance projects to address facility conditions affecting either employee safety or mission-operational readiness. Currently there is a \$50M backlog of high priority repair and modernization projects. This request begins to address critical repairs, maintenance and modernization projects, including sewer, power, heating and ventilation upgrades. Funding will also support the development and implementation of an annual integrated facility inspection program to assess facility conditions at NOAA-owned facilities, coordinated capital investment planning and execution for NOAA construction projects, and program direction and oversight for NOAA's major construction program.

NOAA's Environmental Compliance, Health & Safety Program. This request provides funding to ensure a safe and environmentally compliant work environment as required by Federal, state and local laws, and address the backlog of environmental cleanup projects. Funds will be used to address deficiencies in maintaining hazardous material storage tanks; inspecting and abating all asbestos and lead-based paint materials; providing facility safety inspections, field location program support, employee and facility safety equipment, and workplace employee training.

OMAO \$129,855,000

#### **Marine Operations and Maintenance**

NOAA requests an increase of \$800,000 and 0 FTE for Maritime Crew Safety and Rotation. This funding will enhance safety aboard NOAA vessels. Compliance with Safety of Life at Sea (SOLAS) conventions will prevent NOAA ships from being potentially detained in foreign ports because of lack of complete certifications and will enable NOAA vessels to meet the intent of industry standards and regulations. From FY



2004 to FY 2007, NOAA will experience an approximate 33% increase in the number of ships and a 39% increase in the number of seagoing positions. By providing effective staffing rotation on five (5) of NOAA's 21 ships, NOAA will be able to reduce the high attrition rate for wage mariners from 25% to 20%.

NOAA requests \$4,500,000 and 7 FTE for Operation of New NOAA Vessels. This request will address the additional operational needs of vessels added to NOAA's fleet over the last two years. The additional funding will support operations on HI'IALAKAI, OSCAR DYSON, McARTHUR II, THOMAS JEFFERSON, and HENRY B. BIGELOW and will support Fisheries Survey Vessel 3 (FSV3).

NOAA requests \$2,992,000 and 0 FTE for Maintenance of NOAA's New Vessels. Of this funding, \$2,893,000 will address the additional maintenance needs of NOAA's new vessels: HI'IALAKAI, OSCAR DYSON, McARTHUR II, THOMAS JEFFERSON, and HENRY B. BIGELOW. An additional \$99,000 will fund first-year maintenance of NOAA's third vessel in a four-vessel construction contract, FSV3. These ships have been added to the NOAA fleet over the last two years to increase the capabilities of the fleet and to replace aging vessels at the end of their useful life. The maintenance, repairs, and spare parts cannot be absorbed in NOAA's current budget. Stocking the vessels with spare parts will prevent disruptions in scientific cruises due to early returns to homeport or detours to other piers for unexpected repairs.

#### **Aviation Operations**

NOAA requests \$680,000 and 0 FTE for G-IV Instrumentation Support. This request will fund ongoing ORF support to the one-time G-IV instrumentation upgrade (PAC). These funds will enable NOAA to operate and maintain the instrumentation on the G-IV needed to process and transmit new hurricane data from the aircraft for assimilation into the new Hurricane Weather Forecast (HWRF) model. The increase is necessary to maintain the newly acquired sensors (provided in the FY 2006 supplemental) that provide the new data and to support the analysis, quality control, and assimilation of these data into the HWRF model.

## Chapter 5

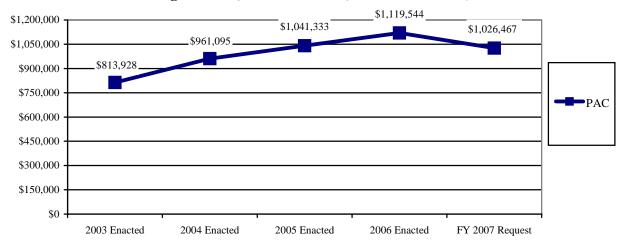
# NOAA Procurement, Acquisition and Construction



### **Procurement, Acquisition and Construction**

(Dollars in Thousands)	FY 2006	FY 2007	Program	Total
(Donars in Thousands)	Enacted	Base	Changes	Request
Procurement, Acquisition and Construction (PAC)				
Systems Acquisition				
Ocean and Atmospheric Research	\$9,369	\$9,395	\$984	\$10,379
National Weather Service	79,575	71,576	(4,965)	66,611
National Environmental Satellite, Data and	772,234	769,620	112,456	882,076
Information Service				
Program Support	17,730	0	0	0
Total Systems Acquisition	878,908	850,591	108,475	959,066
Construction				
National Ocean Service	91,311	4,873	7,800	12,673
National Marine Fisheries Service	30,444	0	0	0
Ocean and Atmospheric Research	0	0	0	0
National Weather Service	21,825	20,779	11,030	31,809
National Environmental Satellite, Data and	2,249	2,228	0	2,228
Information Service				0
Program Support	19,725	0	0	0
Total Construction	165,554	27,880	18,830	46,710
Fleet - OMAO	61,596	35,542	(14,851)	20,691
Aircraft - OMAO	13,486	0	0	0
GRAND TOTAL PAC	\$1,119,544	\$914,013	\$112,454	\$1,026,467
Total FTE	174	174	7	181

#### Budget Trends, FY 2003 - 2007 (dollars in thousands)



www.ofa.noaa.gov

### **Procurement, Acquisition and Construction**



NOAA's Procurement, Acquisition and Construction (PAC) account is mission critical to all agency programs and contributes significantly to achieving all NOAA Strategic Goals. The system acquisition projects included in this request will have a major impact on our ability to monitor and to forecast weather and climate change on a global basis. The construction projects will aid environmental recovery efforts and address NOAA infrastructure needs in housing the NOAA Center for Weather and Climate Prediction. Our fleet replacement project adjustments will continue construction and sustain NOAA fisheries research programs.

#### **ADJUSTMENTS TO BASE:**

The NOAA Procurement, Acquisition and Construction (PAC) requests adjustments to FY 2007 Base of \$1,288,000 and \$206,819,000 in terminations.

#### PAC PROGRAM CHANGE HIGHLIGHTS FOR FY 2007:

For FY 2007, NOAA requests an increase of \$112,454 with a total of \$1,026,467 for procurement, acquisition and construction programs. These changes include 20 major system programs, seven construction projects, three fleet projects, and withdrawal of funding for one aircraft project. Detailed numeric breakouts are located in Chapter 3, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2007 Technical Budget. Note that outyear figures are estimates, and future requests will be determined through the annual budget process.

#### **SYSTEMS ACQUISITION**

\$959,066,000

#### Office of Oceanic and Atmospheric Research

fully supported with the requested increase.

\$10,379,000

#### **Research Supercomputing**

Annual Funding Requirements (BA in Thousands)

		FY 2008	FY2009	FY2010	FY2011
	FY2007	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>
Research					
Supercomputing/CCRI	10,379	10,379	10,379	10,379	10,379

NOAA requests an increase of \$984,000 and 0 FTE for a total of \$10,379,000 and 0

FTE for NOAA's Research Supercomputing/Climate Change Computing Initiative. This program supports a very large, scalable computer system that provides critical computing, storage, and analysis capabilities, as well as model development and infrastructure support, for meeting the objectives of the Administration's Climate Change Science Program (CCSP). Research into expanding the scientific understanding of the physical, chemical, and biological processes that govern the behavior of the Earth System requires a special focus on the development and utilization of large-scale computer simulations for environmental modeling. As part of the CCSP, NOAA plays a leading role in developing these computer simulations as well as hosting the High Performance Computing Systems (HPCS) on which they run. The CCSP establishes NOAA's Geophysical Fluid Dynamics Laboratory (GFDL) as one of two national Climate Modeling Centers that will coordinate and accelerate climate modeling activities, and provide relevant decision-support information on a timely basis. Toward this end, the CCSP Strategic Plan specifically calls for an increase in computational resources to enable systematic generation of model products needed by the impacts and policy communities. This climate computing will be integrated into NOAA's new R&D HPCS being implemented in FY 2007. The R&D HPCS represents a new, holistic, "One-NOAA" approach to planning, acquiring, and managing its HPC resources and will be

#### **Tsunami Warning Program**

Annual Funding Requirements (BA in Thousands)

		FY 2008	FY2009	FY2010	FY2011
	FY2007	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>
Tsunami Warning	1,030	0	0	0	0
Program					

NOAA requests a decrease of \$2,440,000 and 0 FTE for a total of \$1,030,000 to reflect the planned reduction in the procurement of program assets that were required to accelerate the development and deployment of a national tsunami warning system in FY 2005 and FY 2006. Funds will be used to procure the four remaining Deep-ocean Assessment and Reporting of Tsunamis (DART) buoy spares. This budget request is necessary to complete the foundation laid by the Administration in FY 2005 and FY 2006 to strengthen the U.S. tsunami warning program.

# NOAA's Environmental Real Time Observation Network (NERON) (formerly known as Cooperative Observer Network Modernization)

Annual Funding Requirements (BA in Thousands)

,	FY2007	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
COOP Modernization/ NERON/ HCN/Surface Wx	4,234	4,234	4,234	4,234	4,234

NOAA is requesting no change to the \$4,234,000 base for NERON, which will provide the United States with a network of accurate, real-time surface weather data (temperature and precipitation at a minimum) obtained with state-of-the-art measurement, monitoring, and communication equipment. Quality controlled, higher density, real-time surface data will preserve and enhance the climate record of the Nation and improve temperature forecast skill, river height forecast error, radar estimates of precipitation, drought monitoring resolution, hydrology planning, and energy optimization for NWS customers. A specific goal of NERON is to form the infrastructure for the National Integrated Drought Information System (NIDIS). Additional sensors from proven commercial off-the-shelf technology, including wind data, can provide timely data for response to homeland security events or disasters. The objective of NERON is to deploy, integrate or upgrade up to 8,000 modernized sites. A part of NERON is the Historical Climate Network (HCN), comprised of approximately 1200 stations. Because of its unique purpose as the long-term network developed to assist in the detection of regional climate change, it is a high priority of NWS to ensure the integrity of its long-term database. Like other manual NERON sites, the HCN uses older technology, and the data are not available in real time. Real time observations are necessary to meet users' needs and to provide sensor information for prompt maintenance actions. The modernization of HCN sites will mitigate the lack of information from geographical sub-regions and provide, in real-time, very high quality surface observations of temperature and precipitation that meets climate, hydrology, and weather and water forecasting needs. Modernizing the HCN will reduce the uncertainty in the measure of regional climate change.

#### **NOAA** Weather Radio

Annual Funding Requirements (BA in Thousands)

		FY 2008	FY2009	FY2010	FY2011
	FY2007	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>
Complete & Sustain					
NOAA Weather Radio	5,594	5,594	5,594	5,594	5,594

NOAA requests no change the \$5,594,000 base to complete and to sustain NOAA Weather Radio (NWR). Funds will be used to procure all of the transmitters for the seventeen (17) sites identified as high risk of severe weather events and begin installations. Nine (9) transmitters are planned to be installed in FY06 and the remaining eight (8) in FY07. Additionally, funds will be used to begin the refurbishment of four hundred (400) stations established in the 1970s, eliminating single points of failure and improving network reliability.



**NOAA** Weather Radio

#### Weather and Climate Supercomputing

Annual Funding Requirements (BA in Thousands)

		FY 2008	FY2009	FY2010	FY2011
	FY2007	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>
Weather & Climate					
Supercomputing	19,092	19,092	19,092	19,092	19,092

NOAA requests no change to the \$19,092,000 base for Weather and Climate Supercomputing. The cyclical upgrade of the NWS weather and climate supercomputing capability is intended to procure the computing and communications equipment needed to receive and process the increasing wealth of environmental data acquired by modernized observing systems, process improved and more sophisticated numerical weather prediction models, and stay current with the supercomputing technology the market has to offer. Execution of this program promotes public safety and the protection of property by providing the National Center for Environmental Protection (NCEP) with the computer systems that are capable of producing more accurate NWS climate and numerical weather prediction (NWP) guidance products for hurricanes, severe thunderstorms, floods, and winter storms. Additionally, the supercomputing system more accurately forecasts large-scale weather patterns in the medium (3 to 10 days) and extended range (30 days), plus forecasts of major climate events such as El Niño and La Niña. In addition, the computer upgrades will improve the delivery of products to the field and provide system users with enhanced productivity. These products and services will lead to significant economic benefits for users, like the agriculture, construction, and transportation industries.

#### **Weather and Climate Supercomputing Backup**

Annual Funding Requirements (BA in Thousands)

,	FY2007	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
Weather & Climate Supercomputing Backup	7,077	7,077	7,077	7,077	7,077

NOAA requests no change to the \$7,077,000 base for the Weather and Climate Supercomputing Backup. Because of the critical need of the weather and climate output, it is essential that a backup capability be operational, as part of contingency planning.

#### **Automated Surface Observing System**

Annual Funding Requirements (BA in Thousands)

	FY2007	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
ASOS	3,935	3,935	0	0	0

NOAA requests a decrease of \$700,000 and 0 FTE for a total of **\$3,935,000** for the Automated Surface **Observing** System (ASOS). This decrease reflects a planned change implementation strategy for 240 of the total 377 sites from 40,000 foot ceilometers to 25,000 foot ceilometers.



**Automated Surface Observing System** 

#### **Advanced Weather Interactive Processing System**

Annual Funding Requirements (BA in Thousands)

(Drin Modernae)	FY2007	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
AWIPS	12,764	12,764	12,764	12,764	12,764

NOAA requests no change to the \$12,764,000 base for the Advanced Weather Interactive Processing System (AWIPS)/NOAAPort. AWIPS is the cornerstone of the modernized NWS. This system integrates and displays all hydrometeorological data at NWS field offices. AWIPS acquires and processes data from modernized sensors and local sources, provides computational and display functions at operational sites, provides robust communications system to interconnect NWS operational sites, and disseminates warnings and forecasts in a rapid, highly reliable manner. This system integrates satellite, NEXRAD Doppler weather radar data, and numerical weather prediction data enabling field forecasters to better visualize environmental processes to enable the creation of timely and accurate forecasts and warnings. AWIPS provides the only display for NEXRAD Doppler weather radar data at NWS Weather Forecast Offices (WFOs) and River Forecast Centers (RFCs). The AWIPS NOAAPort satellite broadcast network

offers the communications capability to provide internal and external users with open access to much of NOAA's real-time environmental data.

These funding resources will be used to further improve AWIPS processing, communications, and software architecture to support system processing demands from increases in NEXRAD Doppler weather radar data, increases in NCEP model data, and new NESDIS polar and geostationary satellite imagery. These pre-planned and ongoing NOAA investments in modeling, satellite instruments, and radar improvements (NEXRAD Product Improvement) represent NOAA's commitment to bring forecasters the data and information required to improve forecast accuracy and warning lead times.

NWS Government Performance and Results Act goals are based on the effective use of these technology investments along with advanced decision assistance tools, forecast preparation and advanced database capabilities. Sustained investment in the AWIPS hardware, communications, and software infrastructure is necessary to achieve these performance goals to further improve NWS Tornado Warning Lead Time, Flash Flood Warning Lead Time and Winter Storm Warning Lead Times. These cyclic replacements occur every three years to ensure that NWS stays abreast of technological changes.

#### **Next Generation Weather Radar**

Annual Funding Requirements (BA in Thousands)

		FY 2008	FY2009	FY2010	FY2011
	FY2007	<u>Estimate</u>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>
NEXRAD	8,376	8,376	8,376	8,376	8,376

NOAA requests no change to the \$8,376,000 base for the Next Generation Weather Radar (NEXRAD). NEXRAD is a Doppler weather radar system that provides automated signal processing, computerized processing of data by sophisticated meteorological software algorithms, high-capacity, processor-driven and a communications capability. The system is modular in design, upgradeable, has a long life-cycle expectancy, and provides both government and commercial sector weather users with a wide array of automated weather information that will increase their capability to meet their respective operational requirements. For the NWS, the system uses Doppler technology and hydrometeorological processing to provide significant increases, both in the functional capability and in performance, compared with previous radars, including improved tornado and thunderstorm warnings, increased air safety, improved flash flood warnings, and improved water resources management.

#### **NWS Telecommunication Gateway**

Annual Funding Requirements (BA in Thousands)

	FY2007	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
NWSTG	495	495	495	495	495

NOAA requests no change to the \$495,000 for the NWS Telecommunications Gateway (NWSTG) Legacy Replacement. The NWSTG is the NWS communications hub for collecting and distributing weather information to its field units and external users. Replacing the NWSTG system with up-to-date technology will reduce the current delays in collecting and disseminating data by reducing transit time through the NWSTG. The replacement will ensure reliable delivery of NWS products to users and will fully capitalize on better observation data and prediction models to improve services. In FY 2006, NWS will conclude a three-year effort to replace the National Weather Service Telecommunications Gateway (NWSTG) switching system and repair and upgrade NWSTG facilities. In FY 2007, NWS will execute limited technical refresh in the second quarter, and implement NWS Back-up Telecommunications Gateway (BTG) infrastructure.

#### **Radiosonde Network Replacement**

Annual Funding Requirements (BA in Thousands)

		FY 2008	FY2009	FY20010	FY2011
	FY2007	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>
Radiosonde					
Replacement	4,014	4,014	4,014	0	0

NOAA requests a planned decrease of \$333,000 and 0 FTE for a FY 2007 total of \$4,014,000 for the Radiosonde Replacement Program. This decrease reflects extending the deployment schedule by one year so that the network is complete in FY 2009.

## National Environmental Satellite, Data and Information Service

#### **Geostationary Operational Environmental Satellites**

Annual Funding Requirements (BA in Thousand)

	FY2007	FY 2008 Estimate	FY2009 Estimate	FY20010 Estimate	FY2011 Estimate
GOES	439,607	532,079	539,563	570,501	542,371

#### **Geostationary Operational Environmental Satellite (GOES):**

NOAA is requesting a net increase of \$104,039,000 and 0 FTE for the Geostationary Operational Environmental Satellites (GOES), a total request of \$439,607,000.

NOAA is requesting a planned decrease of 0 FTE and \$600,000 in FY 2007 for zero funding for the GOES I-M Series. FY 2006 was the last year of GOES I-M funding.

NOAA is requesting a planned decrease of 0 FTE and \$8,803,000 for a total of \$108,239,000 for the GOES-N Series in FY 2007. The NOAA GOES program continues the development, procurement, and launch of the next series of three GOES satellites – the GOES-N series. The spacecraft contract for the GOES-N series is a firm fixed price contract. The GOES-N series program also includes separate contracts for the instruments, one for the imager and sounder and one for the Solar X-ray Imager. The instrument contractors have completed delivery of all flight model instruments.

FY 2007 GOES-N funding will be used for: Spacecraft / launching; NASA technical management; the government program office; Product development; and Ground systems and backup.

NOAA is requesting an increase of 0 FTE and \$113,442,000 for a total request of \$335,800,000 for the GOES-R Series, consistent with the baseline funding profile for the program identified in the FY 2006 President's Budget. The GOES-R Series will provide continuity of coverage and advanced capabilities for NOAA's geostationary satellites, which serve as the Nation's continuous severe weather sentinels in space. The GOES-R Series satellites will not only provide critical weather observations for severe weather events such as hurricanes, but will also provide key enhancements in observational capabilities for climate, oceans and coasts, and the space environment. Data from NOAA's satellites contributes to public safety and the economy. Weather and climate-sensitive industries, both

directly and indirectly, account for approximately \$3.0 trillion of the United States gross domestic product (about one-third). Average annual damage from tornadoes, hurricanes, and floods is \$11.4 billion with about 100 deaths annually.

FY 2007 GOES-R funding will be used for systems acquisition, continued efforts on satellite instruments, and the government program office in support of an initial GOES-R launch date in 2012.



GOES-12 Image showing Hurricane Wilma is located westsouthwest of Key West, Florida.

#### **Polar-Operational Environmental Satellite Systems**

Annual Funding Requirements (BA in Thousands)

	<u>FY2007</u>	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
POES	89,906	62,308	41,919	41,706	31,374

NOAA requests a planned decrease of 0 FTE and \$11,861,000 for a total request of \$89,906,000 for the continuation of the Polar-Operational Environmental Satellite Systems (POES) program. POES is nearing the end of its production, with one remaining satellite to be launched, along with supporting commissioning of the first Metop satellite in FY 2007. On September 6, 2003, NOAA-N prime was involved in a serious accident at the contractor's facility. The damage to NOAA-N Prime was assessed, estimated rebuild costs were developed, and agreements negotiated. With NOAA's approval, a contract modification between NASA and Lockheed Martin to rebuild NOAA-N Prime was signed on September 29, 2004. Progress continues on track for the planned December, 2007 launch date.



POES N on May 20, 2005

FY 2007 POES funding will be used for: Spacecraft & Metop; launching services; NASA technical management; the government program office; product development; and ground systems and backup.

#### National Polar-orbiting Operational Environmental Satellite Systems

Annual Funding Requirements (BA in Thousands)

	FY2007	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
NPOESS	337,870	343,863	297,225	373,872	405,923

NOAA is requesting an increase of 0 FTE and \$20,278,000 for a total request of \$337,870,000 for the continuation of the tri-agency National Polar-orbiting Operational Environmental Satellite System (NPOESS) program that will replace the NOAA POES program after completion of the current NOAA K-N' series of satellites. This request represents NOAA's share of the converged NOAA/DoD/NASA program. In FY 2007, funds are required to continue the development and production of the NPOESS spacecraft and instruments, including the Visible Infrared Image radiometer (VIIRS), the Conical Microwave Imager Sounder (CMIS), the Cross-track Infrared Sounder (CrIS), the Ozone, Mapping and Profiler Suite (OMPS), the Aerosol Polarimetry Sensor (APS), and the Space Environmental Sensing Suite (SESS). Continued development of these instruments is critical for their timely and cost effective delivery.

The National Polar-orbiting Operational Environmental Satellite System (NPOESS) program was created by Presidential Directive in 1994 to converge the polar weather satellite systems of the Department of Defense (DoD)(Defense Meteorological Satellite Program) and the Department of Commerce (DOC)(Polar-orbiting Operational Environmental Satellite (POES)), while incorporating technological advances from the National Aeronautics and Space Administration (NASA). DOC, through NOAA, has lead operational responsibility for NPOESS, DoD through the U.S. Air Force has lead system acquisition responsibility, and NASA has responsibility for developing and inserting new technologies into the NPOESS program and providing a conduit for new instruments to move from research to operations. All three agencies work within the context of a jointly-staffed Integrated Program Office.

NPOESS will provide real-time, global and regional environmental imagery, and meteorological, climatic, terrestrial, oceanic, and solar-geophysical data. NPOESS instruments will deliver more accurate atmospheric and oceanographic data to support medium to long-range weather forecasts and severe storm warnings, reducing loss of life and property, and advancing the national economy. These data are also critical for seasonal to inter-annual forecasts. The aviation community will benefit from more accurate and timely forecasts and warnings. Improved wildfire monitoring and enhanced weather warnings will benefit the agriculture industry. A better understanding of ocean winds, waves, and currents will lead to improved vessel routing for safety and fuel savings. NPOESS data will provide military leaders better situational awareness critical to combat planning and achieving air superiority, and winning war with minimum

casualties, helping to maximize combat effectiveness through improved coverage and distribution of atmospheric and space environmental conditions.

The funding profile is based on the baseline in the FY 2006 President's Budget. Any changes due to cost or schedule issues will be reflected in future budget submissions.

#### National Environmental Satellite, Data and Information Service

\$2,228,000

# Satellite Command and Data Acquisition (CDA) Infrastructure – Protecting Critical Operational Capabilities

NOAA's CDA Infrastructure program at the Wallops and Fairbanks CDAs is to ensure continuation of the current 99.9 percent data availability for NOAA environmental satellite systems. NOAA has partnered with the U.S. Army Corps of Engineers and developed facilities master plans for Wallops and Fairbanks facilities. NOAA will then incrementally implement the facilities master plans to support a phased, multi-year program to comprehensively renovate and modernize the facilities, infrastructure, and equipment to minimize or eliminate safety, hazardous materials, waste water treatment, and other deficiencies at the facilities that could lead to outages and service disruptions caused by failure of supporting infrastructure at the stations. The Fairbanks facility is located in a seismic zone and operates in severe sub-Arctic conditions, with temperatures routinely reaching minus 60 degrees Fahrenheit during the winter months. The Wallops facility, on the Atlantic coast, is subject to a corrosive salt air environment and lies in the path of hurricanes that hit the U.S. East Coast.

CONSTRUCTION \$46,710,000

#### **National Ocean Service**

\$12,673,000

#### **National Estuarine Research Reserve System**

**Annual Funding Requirements** 

(BA in Thousands) FY 2008

FY20010 FY2009 FY2011 FY2007 Estimate **Estimate Estimate** Estimate **NERRS** 7,178 7,178 7,178 7,179 7,128

NOAA requests an increase of \$2,305,000, for a total of \$7,178,000, for discretionary National Estuarine Research Reserve System (NERRS) construction and land acquisition projects. This increase will maintain the level of funding needed to support this Federal-state partnership designed to protect and understand valuable estuarine resources through research and education. The facilities and land of the reserves are owned and managed by the states in this Federal-state partnership. Federal funds are matched 50:50 for land acquisition and 70:30 for construction protects (Federal/state funds). The land acquisition projects will provide greater protection to reserve resources. The construction projects include interpretive centers, reserve research facilities, educational exhibits, and boardwalks or trails. Having adequate facilities makes a considerable difference in the quality of research, education, outreach and resource protection programs that can be conducted at the reserves.

The NERRS is a Federal-state partnership designed to protect and understand valuable estuarine resources through research and education. Reserves are publicly owned lands and onsite facilities that provide opportunities for researchers as well as the public to better understand these estuarine areas. Supplementing or updating facilities at the 26 reserves will be carried on in conjunction with the development of system-wide construction plans. All construction activities are carried out based on the current needs for implementing core NERRS program and external opportunities for partnerships. When it is available, reserves will acquire additional, previously identified near-by critical habitat to increase protection and provide places for conducting long-term science, education, and demonstration programs. The facilities and land of the reserves are owned and managed by the states in this Federal-state partnership.

#### **National Marine Sanctuaries Construction**

Annual Funding Requirements

(BA in Thousands)

	FY2007	FY 2008 Estimate	FY2009 Estimate	FY20010 Estimate	FY2011 Estimate
NMS	5,495	5,495	5,495	5,495	5,495

NOAA requests an increase of \$5,495,000, for a total of \$5,495,000, for discretionary National Marine Sanctuary (NMS) construction projects in FY 2007. The Sanctuary program will continue efforts on many of the projects begun in prior years, and address operational facility requirements and small outreach efforts, i.e., exhibits. The NMS program will continue to implement a comprehensive facilities plan that prioritizes needs and opportunities at individual sites for constructing sanctuary visitor centers, collaborative education projects and operational needs. These facilities serve as important windows into the resources of the sanctuaries, since most of these special marine environments are offshore and not easily accessible by many visitors. Whenever possible, sanctuaries utilize existing aquaria, museums, and other appropriate facilities to develop cooperative centers, where the public and environmental decision makers can gain direct, objective and focused information on major conservation issues.

Based upon the NMSP's priorities, current discretionary PAC funds requested in FY 2007 would be used complete construction of the Eco-Discovery Visitor Center at the Dr. Nancy Foster Complex in Key West, Florida (\$800K); complete construction of the Hawaiian **Islands** Humpback Whale National Marine Sanctuary multipurpose facility in Kihei, Maui (\$600K); repair the sea wall at the Dr. Nancy Foster Complex in Key West, Florida (\$2M); and renovate space at the



The Dr. Nancy Foster Florida Keys Environmental Complex, currently under construction, will feature 6,000 square feet of interactive exhibits on the Florida Keys.

National Marine Fisheries Service (NMFS) Galveston Lab that was recently occupied by the Flower Garden Banks National Marine Sanctuary (FGBNMS) (\$700K). Funds will

also be used to initiate the design, fabrication, and installation of NMSP/NOAA exhibits at the Oakland Museum (Oakland, California), Long Beach Aquarium (Long Beach, California), and a visitor center in Provincetown, Massachusetts (\$950K); and reconstruct the pier at Stellwagen Bank National Marine Sanctuary to service a new 48 foot vessel (\$500K).

Construction priorities are subject to change due to various factors such as new opportunities to partner with other organizations, changes in the physical environment, and impacts from natural disasters such as hurricanes.

#### **National Weather Service**

\$31,809,000

Annual Funding Requirements (BA in Thousands)

	FY2007	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
NCWCP	19,305	14,100	6,700	6,700	6,700



**NOAA** Center for Weather and Climate Prediction

NOAA requests an increase of \$11,000,000 and 0 FTE for a total of \$19,305,000 to prepare the NOAA Center for Weather and Climate Prediction (NCWCP) for FY 2008 occupancy and operations. This FY 2007 increase is consistent with the planned NCWCP investment profile to implement mission critical systems overlap during the transition/move from the current World Weather Building (WWB) to the NCWCP. NOAA must be ready to install systems and equipment during the six-month period prior

to the delivery of space, and in the months immediately preceding the phased completion of construction. Lastly, the funding will be used for project management tasks supporting technical oversight of the construction, occupancy, and mission critical systems relocation processes. Also, detailed planning and closely coordinated relocation activities are an absolute requirement to ensure that critical data products are not interrupted during the relocation of 24x7 mission critical systems.

This project is a key component of the NWS' effort to improve its weather and climate modeling performance, to accelerate the transfer of newly developed scientific information into operations, and to improve the use of global environmental satellite data. NWS has demonstrated a direct linkage between establishing new facilities in the proximity of research organizations, and improved program performance. The expiration of the WWB lease dictates the timing of the NCWCP Project and affords an outstanding opportunity to enhance the NWS efforts to protect the continuity and flow of critical weather warning, forecasts and data products to the Public.

The award of the lease by GSA in September 2005 will ensure occupancy of the new facility in October 2008. FY 2005 funding provided project management for NOAA, and allowed NOAA to initiate the planning and engineering required to support the mission systems relocation. In FY 2007, construction of the NCWCP will be completed. Simultaneously, NOAA will implement procurements to complete all tenant improvements and outfitting such as but not limited to: telecommunications cabling (systems acquisition and installation); interior design, system furniture acquisition and installation; and relocation costs. The FY 2007 effort will also involve the one-time relocation of mission critical operational systems from the WWB to the NCWCP. This critical system relocation funding will ensure that NOAA will be able to operate its "mission critical" programs by providing an overlap in system functionality during the physical relocation from the WWB to the NCWCP. Funding for project management includes a project manager, space planner, a project engineer and technical support, to provide continued coordination and oversight among all involved parties including GSA, users, contractors, and consultants.

NOAA requests a planned decrease of \$1,000,000 and 0 FTE for a total of \$12,504,000 to reflect the transfer of \$1,000,000 of Weather Forecast Office (WFO) construction funding to NOAA facilities to support NOAA facility planning requirements. Planned relocation (construction) of the Office of Atmospheric Research (OAR) housing currently collected at the WSO Bairow, will be deferred to FY 2008. This is a one time deferral. Construction elements currently ongoing include the upgrade and modernization of Alaska and Pacific Region Weather Service Offices, Tsunami Warning Centers, and associated employee housing units; upgrades of Heating, Ventilation, and Air Conduction (HVAC) systems at approximately 60 WFOs, uninterrupted power supply (UPS) replacements, and mitigations of all building and fire code violations. This construction effort is essential to bring the NWS into full compliance with federal law and national and local building codes.

#### FLEET REPLACEMENT

#### Office of Marine and Aviation Operation

\$20,691,000

#### **Fisheries Survey Vessels**

(BA in Thousands)

,	FY2007	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
Fisheries Survey Vessels	13,835	965	0	0	0

NOAA requests a decrease \$18,565,000 and 0 FTE for a total of \$13,791,000 and 0 FTE for Fisheries Survey Vessels. A net decrease in funding is requested for the Fisheries Survey Vessel (FSV) program. This includes a \$1,000,000 to complete FSV 3. A decrease of \$19,565,000 is requested for FSV 4, reflecting decreased requirements as the ship nears completion. These vessels are required to collect fish stock data and data necessary to protect marine mammals. The requested funding will enable NOAA to continue construction of the fourth ship on the existing four-ship contract. FSV 3 and 4 will deploy state-of-the-art acoustic technologies, combined with a very quiet radiated-noise signature, to enhance the effectiveness and efficiency of at-sea resource surveys. There are no charter vessels that can provide this acoustically quiet capability. These capabilities will enable NOAA to monitor up to nine times more volume of water for the same time and distance traveled by NOAA's current ships. These vessels will fully support NMFS' new FETCH Autonomous Underwater Vehicle to extend survey sampling beyond the trackline of the ship. Additional funding in the outyears will be used to prepare the ships for operations in support of NOAA's Ecosystem Mission Goal.

#### **HENRY B. BIGELOW Calibration**

Outyear Funding Requirements (BA in Thousands)

	FY2007	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
BIGELOW Calibration	3,500	0	0	0	0

NOAA requests an increase of \$3,500,000 and 7 FTE for a total of \$3,500,000 for calibration of HENRY B. BIGELOW, (FSV 2). The vessel needs to be calibrated with the ship it will replace, ALBATROSS IV. Funds are to operative ALBATROSS IV in FY 2007 side by side with BIGELOW. BIGELOW is expected to be delivered to NOAA in FY 2006.



**HENRY B. BIGELOW** 

BIGELOW is designed and constructed to have an extremely low acoustic signature to meet the modern data collection requirements of the National Marine Fisheries Service. The vessel will perform hydro-acoustic surveys of fish and conduct bottom and midwater trawls while simultaneously running physical and biological oceanographic sampling during a single deployment—a combined capability unavailable on existing NOAA ships or from the private sector. Once operational, BIGELOW will enable major improvements in the precision and accuracy of scientific assessments, the monitoring of additional living marine resources, and significantly enhanced fisheries and protected-species management on the East Coast.

ALBATROSS IV has conducted the Northeast Fisheries Science Center's bottom trawl surveys since the 1960's. The 42+ year time series of data in this survey is the longest time series of its kind in the world and is of enormous value for conducting fish-stock and ecosystem assessments. Each time a different vessel is used in a survey, an additional source of error is introduced into the data set. Because the size, power, and operating characteristics of BIGELOW differ greatly from those of ALBATROSS IV, this error will be considerable. To avoid this, BIGELOW will need to be operated jointly with the ALBATROSS during a period of 18 months in FY 2007 and FY 2008 to calibrate the groundfish surveys.

#### **Hydro Survey Launch Construction**

Outyear Funding Requirements (BA in Thousands)

,	<u>FY2007</u>	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
Hydro Survey Launch	2,400	2,400	2,400	2,400	2,400

NOAA requests \$2,400,000 and 0 FTE for Hydro Survey Launch Construction. This request will fund construction of two (2) hydrographic survey launches equipped with multibeam sonar equipment. Launches are small boats deployed from NOAA's ships in order to collect data in waters too shallow for NOAA vessels. NOAA's launches are approaching 30 years old, which is double their recommended replacement schedule. They are experiencing hull structural failures, obsolescence issues with the machinery and mission equipment, and field breakdowns.

These survey launches significantly increase the capacity of the NOAA fleet to collect hydrographic data and contribute to the reduction of NOAA's backlog of surveys of navigationally significant areas. This capability is especially critical in Alaska, where over half of the survey backlog exists and the survey season is shorter due to weather conditions.

#### Temporary Berthing for HENRY B. BIGELOW

Outyear Funding Requirements (BA in Thousands)

	FY2007	FY 2008 Estimate	FY2009 Estimate	FY2010 Estimate	FY2011 Estimate
Temp. Berthing for BIGELOW	1,000	0	0	0	0

NOAA requests \$1,000,000 and 0 FTE for temporary berthing for HENRY B. BIGELOW. The funding will address berthing issues associated with delivery of NOAA's second new FSV, HENRY B. BIGELOW, which will be homeported in the northeastern United States. BIGELOW will replace ALBATROSS IV after an 18 month comparative-trawl calibration. ALBATROSS IV and DELAWARE II are currently homeported at NOAA's Northeast Fisheries Science Center (NEFSC) at Wood Hole, Massachusetts. However, due to HENRY B. BIGELOW's larger size and draft, the current pier, bulkhead, and shoreside staging areas at the NOAA Facility are inadequate to support this new fisheries survey vessel. NOAA would use the funds requested to provide temporary berthing of BIGELOW, while determining the best permanent pier site for BIGELOW. BIGELOW is scheduled to be delivered to NOAA in the third quarter of FY 2006.

NOAA has an agreement with the Woods Hole Oceanographic Institute (WHOI) to provide temporary berthing on an as-available basis for the near term, but not indefinitely. Space may not always be available at WHOI to dock NOAA's three vessels. When a berth is not available at WHOI, NOAA will have to rent a berth in Massachusetts or Rhode Island. Another request for \$3,500,000 for BIGELOW calibration with ALBATROSS IV is included in the Fleet Replacement section above. In addition, \$500,000 for first-year operations and maintenance of BIGELOW is included in the Marine Services section.

NOAA	FY	2007	<b>Budget</b>	Summary

[Page intentionally left blank]

# Chapter 6

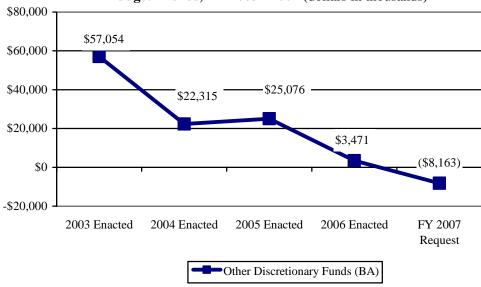
# Other Accounts



### **Other Discretionary Funds**

(Dollars in Thousands)	FY 2006 Enacted	FY 2007 Base	Program Changes	Total Request
Other Discretionary Funds				
Coastal Zone Management Fund	\$0	\$0	\$0	\$0
Fisherman's Contingency Fund	0	0	0	0
Foreign Fishing Observer Fund	0	0	0	0
Fisheries Finance Program Account	2,255	0	0	0
Promote and Develop American Fisheries	(67,000)	(77,000)	0	(77,000)
Pacific Coastal Salmon Recovery Fund	66,571	66,825	0	66,825
Marine Mammal Unusual Mortality Event Fund	0	0	0	0
Medicare Eligible Retiree Health Care Fund	1,645	2,012	0	2,012
Total Other Discretionary Funds (Budget Authority - BA)	\$3,471	(\$8,163)	\$0	(\$8,163)

#### Budget Trends, FY 2003 - 2007 (dollars in thousands)



### **Other Discretionary Funds**



NOAA's other discretionary funds are a significant part of NOAA's ecosystem-based management of coastal and ocean resources. These funds address threatened and endangered species, promote biodiversity, contribute to the improvement of ocean science, and promote fisheries research.

#### **Coastal Zone Management Fund**

The Coastal Zone Management Fund (CZMF) was created in 1990, to reimburse NOAA for expenses incident to the administration of the Coastal Zone Management Act. The CZMF was intended to issue grants to states for improving coastal zone management. Emphasis was placed on planning for unforeseen or disaster-related circumstances and recognition of excellence in coastal management. NOAA will continue to work with Congress to reauthorize the Coastal Zone Management Act.

#### Fishermen's Contingency Fund

The Fishermen's Contingency Fund (FCF) program minimizes financial instability of the fishing industry caused by competing uses of the Outer Continental Shelf (OCS), and provides for timely resolution of claims by vessel owners. The Fishermen's Contingency Fund is authorized under Section 402 of Title IV of the Outer Continental Shelf Lands Act Amendments of 1978. NOAA compensates U.S. commercial fishermen for damage

or loss of fishing gear, vessels, and resulting economic loss caused by obstructions related to oil and gas exploration, development, and production in any area of the Outer Continental Shelf. The funds used to provide this compensation are derived from fees collected on an annual basis by the Secretary of the Interior from the holders of leases, exploration permits, easements, or rights-of-way in areas of the Outer Continental Shelf. FCF account is funded totally through user fees. Disbursements can be made only to the extent authorized in appropriation acts.

#### Foreign Fishing Observer Fund

The Foreign Fishing Observer Fund (FFOF) is financed through fees collected from owners and operators of foreign fishing vessels fishing within the Exclusive Economic Zone (EEZ) of the United States (such fishing requires a permit issued under the Magnuson-Stevens Fishery Conservation and Management Act). This includes long-line vessels fishing in the Atlantic billfish and shark fishery and other foreign vessels fishing in the EEZ. FFOF reimburses NOAA for costs incurred in placing observers aboard foreign fishing vessels. The observer program is conducted primarily through contracts with the private sector. NOAA/NMFS places these observers aboard foreign fishing vessels to monitor compliance with U.S. fishery laws and to collect fishery management data.

Amounts available in the Fund can be disbursed only to the extent and in amounts provided in appropriation acts. In FY 1985 Congress approved the establishment of a supplemental observer program. The program provided that foreign vessels without Federally-funded observers are required to obtain the services of private contractors certified by the Secretary of Commerce. Unobligated balances are sufficient to provide observer coverage aboard foreign vessels fishing within the U.S. EEZ in FY 2007.

#### **Fisheries Finance Program Account**

The Fisheries Finance Program (FFP) Account provides direct loans that promote building sustainable fisheries. This account was established in FY 1997 to cover the cost of financing direct loans as authorized by Title XI of the Merchant Marine Act of 1936. The President's Request proposes loan levels of \$5 million for individual fishing quotas. The re-authorization of the Magnuson-Stevens Fisheries Conservation and Management Act in October 1996 changed the program to provide direct loans rather than loan guarantees previously made under the Fishing Vessel Obligation Guarantee appropriation.

#### **Promote and Develop Fisheries Products**

The Promote and Develop Fisheries Products (PDFP) account makes grants for fisheries research and development projects. Funds are derived from a Department of Agriculture transfer to NOAA from duties on imported fisheries products. An amount equal to 30%

of these duties is made available to NOAA, subject to appropriation limitations. The budget proposes that \$77,000,000 be transferred to the ORF account to offset fisheries research and management activities. ORF expenses related to PDFP support are reimbursed from the PDFP account.

#### **Pacific Coastal Salmon Recovery Fund**

The Pacific Coastal Salmon Recovery Fund (PCSRF) was established to augment state, tribal and local programs to conserve and restore sustainable Pacific salmon populations and their habitats. The FY 2007 funds are to be used by the states of California, Oregon, Washington, Alaska, Idaho and the Pacific Coastal and Columbia River Tribes to supplement state and federal programs and promote the development of federal-state-tribal-local partnerships in salmon conservation efforts. The state and tribes will use these funds for projects necessary for restoration of salmon and steelhead populations that are listed as threatened or endangered, or identified by a State as at-risk to be so-listed, for maintaining populations necessary for exercise of tribal treaty fishing rights or native subsistence fishing, or for



NOAA researcher on vessel to help sustain salmon population

conservation of Pacific coastal salmon and steelhead habitat. Funds provided to the states will have a matching requirement of at least 33% of total costs. Funds provided to Pacific Coastal and Columbia River Tribes do not require matching dollars.

#### Medicare Eligible Retiree Health Care Fund

This account provides for NOAA's contribution to a healthcare accrual fund for NOAA Corps officers estimated at \$367,000. The accrual fund pays for the future healthcare benefits for current officers once they retire and become Medicare-eligible, as well as for their dependents and annuitants. The FY 2003 Department of Defense Authorization Act requires all uniformed services including NOAA to participate in an accrual fund for Medicare-eligible retirees. The Ronald W. Reagan National Defense Authorization Act for 2005 (P.L. 108-375) provided permanent, indefinite appropriations to finance these costs for all uniformed service members. No additional appropriations are requested as part of the FY 2007 President's Budget for NOAA. However, as these costs are borne in support of NOAA's mission, they will continue to be shown as part of the NOAA discretionary total.

#### Other Discretionary Funds ADJUSTMENTS TO BASE:

NOAA requests a net increase of \$621,000 distributed as follows:

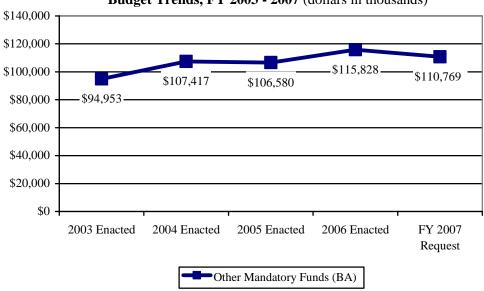
• An increase of \$254,000 for the Pacific Coastal Salmon Recovery fund.



### **Other Mandatory Funds**

(Dollars in Thousands)	FY 2006 Enacted	FY 2007 Base	Program Changes	Total Request
Other Mandatory Funds				
Coastal Zone Management Fund	(\$3,000)	(\$3,000)	\$0	(\$3,000)
Damage Assessment & Restoration Revolving Fund	1,000	1,000	0	1,000
Promote and Develop American Fisheries Products	79,283	79,283	0	79,283
Fisheries Finance Program Account	6,316	0	0	0
Federal Ship Financing Fund	(2,000)	(2,000)	0	(2,000)
Environmental Improvement & Restoration Fund	8,281	8,720	0	8,720
Limited Access System Administration Fund	7,444	7,444	0	7,444
NOAA Corp Commissioned Officers Retirement	18,504	19,322	0	19,322
Total Other Mandatory Funds (Budget Authority - BA)	\$115,828	\$110,769	\$0	\$110,769
Total FTE	20	20	0	20

#### Budget Trends, FY 2003 - 2007 (dollars in thousands)





### **Other Mandatory Funds**



#### **Coastal Zone Management Fund**

The Coastal Zone Management (CZM) Fund was established under the Omnibus Budget Reconciliation Act of 1990 (P.L. 101-508) to receive repayments from the coastal energy impact program. These payments are used for CZM programs and administration as authorized by section 308 of the Coastal Zone Management Act, and will offset CZM administration costs in the ORF account. In FY 2007, NOAA proposes to continue the transfer of authorized funding in the CZM Fund to the ORF account for obligation to facilitate operation of the Fund.

#### Damage Assessment & Restoration Revolving Fund

The Damage Assessment and Restoration Revolving Fund (DARRF) was established in 1990 to facilitate oil and hazardous material spill response, damage assessment and restoration activities for damages to natural resources for which NOAA serves as trustee. The Fund receives proceeds from claims against responsible parties, as determined through court settlements or agreements. In FY 1999 and prior years, funds were

transferred to the Operations, Research and Facilities account for the purposes of damage assessment and restoration. Beginning in FY 2000, funds were expended in DARRF and treated as mandatory budget authority.

DARRF facilitates and sustains: (1) oil and hazardous materials contingency planning and response, automated spill assessment, and countermeasure capabilities; (2) natural resource damage assessment while the Departments of Commerce and Justice seek full reimbursement from potentially responsible parties; and (3) restoration, replacement or acquisition of the equivalent of injured or lost natural resources, including resources of National Marine Sanctuaries and National Estuarine Research Reserves, tidal wetlands and other habitats, for which NOAA is trustee. To fulfill its responsibility as a Federal trustee for living natural resources under the Superfund, Clean Water, and Oil Pollution Acts, NOAA conducts comprehensive assessments of damages to trust resources from discharges of oil or releases of hazardous substances in coastal and marine areas. DARRF uses recovered damages to restore injured resources, monitors the restoration to assess its effectiveness, conducts basic and applied research on restoration methodologies, applies these techniques to restoration of resource habitats, and provides guidance to habitat managers for selecting among restoration approaches.



Oil Spill

As the scientific support coordinator to the U.S. Coast Guard's Federal on-scene coordinator at coastal and marine spills of oil and hazardous materials, NOAA provides critical information on spill trajectory, chemical hazard analyses, and assessments of the sensitivity of marine and estuarine habitats. The program provides similar support to the environmental hazardous waste sites in coastal areas.

# Promote and Develop American Fishery Products & Research Pertaining to American Fisheries Fund

The American Fisheries Promotion Act of 1980 authorized a grants program for fisheries research and development projects to be carried out with funds derived from the import duties the Department of Agriculture collects on fishery-related products. Thirty percent of these duties go towards the Promote and Develop American Fishery Products & Research Pertaining to American Fisheries Fund. The FY 2007 budget estimate is \$79.3 million. Of this amount, \$2.3 million will be used for the grants program to promote industry development through competitively-awarded external grants (Saltonstall-Kennedy) for innovative research and development of projects in the fishing industry and for internal research that complements the external program. The remaining \$77 million will be transferred to offset marine fishery resource programs in the Operations, Research and Facilities appropriation in FY 2007. This program supports the NOAA strategic plan goal to build sustainable fisheries.

#### **Fisheries Finance Program Account**

A11 Fisheries Finance Program Account (FFP) Account authority is subject to the Federal Credit Reform Act of 1990 (FCRA) (2 U.S.C. 661). The FCRA requires estimated loan costs (FCRA cost) be appropriated in cash at the time Congress authorizes annual credit ceilings. FFP Account loan activity demonstrates that no FCRA subsidy cost need be funded in FY 2006. Statutory



authority is found in 46 U.S.C. 1274 and 16 U.S.C. 1801 et seq. FFP Account lending guidelines are found at Title 50 Code of Federal Regulations (CFR) Part 253, subpart B; and tempered by NOAA's sustainable fisheries policy and by the practical considerations of a program that has been self-sustaining throughout its credit history.

#### **Environmental Improvement & Restoration Fund**

The Environmental Improvement and Restoration Fund (EIRF) was established by Title IV of P.L. 105-83, the Department of the Interior and Related Agencies Appropriations Act, 1998, to fund marine research activities in the North Pacific. Twenty percent of the interest earned from this fund is made available to the Department of Commerce. The Fund issues grants to Federal, State, private or foreign organizations or individuals to

conduct research activities on or relating to fisheries or marine ecosystems in the North Pacific Ocean, Bering Sea, and Arctic Ocean. Research priorities and grant requests are reviewed and approved by the North Pacific Research Board with emphasis placed on cooperative research efforts designed to address pressing fishery management or marine ecosystem information needs. This program supports the NOAA strategic plan goal to sustain healthy coasts.

#### **Limited Access System Administration Fund**

The Limited Access System Administration Fund (LASAF) fund was established by Title III of Public Law 104-297. Fee Collections equaling no more than one-half percent of the proceeds from the sale or transfer of limited access system permits are deposited into the Fund. These deposits into the Fund are used to administer an exclusive central registry system for the limited access system permits.

Under the authority of the Magnuson-Stevens Act Section 304(d)(2)(A), NMFS must collect a fee to recover the costs of managing and enforcing the Individual Fishing Quota (IFQ) Halibut/Sablefish program. Funds collected under this authority are deposited into the Limited Access System Administration Fund. Of the funds collected, seventy-five percent of fee payments are to be made available to the Secretary to offset costs of management and enforcement of the halibut and sablefish IFQ program and 25 percent of fees collected are to be made available for appropriation to support the North Pacific IFQ loan program.

#### **NOAA Corp Commissioned Officers Retirement**

The retirement system for the uniformed services provides a measure of financial security after release from active duty for service members and their survivors. It is an important factor in the choice of a career in the uniformed services and is mandated by Federal statutes under Title 10, United States Code. NOAA transfers retirement pay funds to the Coast Guard, which handles the payment function for retirees and annuitants. Health care funds for non-Medicare-eligible retirees, dependents, and annuitants are transferred to the U.S. Public Health Service, which administers the health care program.

#### Marine Mammal Unusual Mortality Event Fund

In response to the death of more than 700 bottlenose dolphins on the East Coast of the United States in 1987–88. **NMFS** established Marine Mammal Health and Stranding Response Program, and within it, the Working Group on Unusual Marine Mammal Mortality Events to determine when an unusual mortality event is occurring, and then to direct responses to such events. Further, in the MMPA Amendments 1992, Congress included



**Marine Mammal** 

specific provisions for investigating and responding to unusual marine mammal mortality events. Specifically, section 404 (16 USC 1421c) authorizes the Marine Mammal Mortality Event Working Group, and section 405 (16 USC 1421d) establishes the Marine Mammal Unusual Mortality Event Fund and describes it purposes and how donations can be made to the Fund.

#### OTHER MANDATORY FUNDS - ADJUSTMENTS TO BASE:

NOAA requests a net increase of \$1,257,000 for ATBs, distributed as follows:

- An increase of \$439,000 for the Environmental Improvement and Restoration Fund; and,
- An increase of \$818,000 for NOAA Corp Commissioned Officers Retirement.

NOAA FY 2007	Budget	Summary
--------------	--------	---------

[Page intentionally left blank]

# Chapter 7

# Special Exhibits

# Summary by Appropriation (Dollars in thousands)

	2005	2006	2007	Increase
<u>Appropriation</u>	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	(Decrease)
Operations, Research & Facilities (ORF)	\$2,789,674	\$2,744,236	\$2,587,843	(\$156,393)
Procurement, Acquisition & Construction (PAC)	1,053,335	1,147,319	1,024,467	(122,852)
Coastal Zone Management Fund	3,000	3,000	3,000	0
Fishermen's Contingency Fund	492	0	0	0
Marine Mammal Unusual Event Mortality Fund	800	0	0	0
Fisheries Finance Program Account	628	283	0	(283)
Pacific Coastal Salmon Recovery	88,798	66,638	66,825	187
Medicare-Eligible Retiree Healthcare Fund	0	1,645	2,012	367
TOTAL APPROPRIATION	3,936,727	3,963,121	3,684,147	(278,974)
Transfers:				
Operations, Research & Facilities				
FROM: Promote & Develop Fishery Products	65,000	67,000	77,000	10,000
Coastal Zone Management Fund	3,000	3,000	3,000	0
Pacific Coastal Salmon Recovery	89	67	0	(67)
Procurement, Acquisition and Construction	1,842	1,147	0	(1,147)
Fisheries Finance Program Account	1	0	0	0
Department of Defense - Navy	18,000	0	0	0
Department of Interior	(4,500)	0	0	0
TO: Procurement, Acquisition and Construction	(366)	0	0	0
Fisheries Finance Program Account	(247)	(1,972)	0	1,972
Marine Mammal Commission	0	0	0	0
Subtotal, ORF	82,819	69,242	80,000	10,758
Coastal Zone Management Fund				
TO: ORF	(3,000)	(3,000)	(3,000)	0
Pacific Coastal Salmon Recovery				
TO: Fisheries Finance Program Account	(493)	0	0	0
TO: ORF	(89)	(67)	0	67
Subtotal, PCSR	(582)	(67)	0	67
Procurement, Acquisition & Construction (PAC)				
TO: ORF	(1,842)	(1,147)	0	1,147
FROM: ORF	366	0	0	0
TO: NASA	0	(26,629)	0	26,629
Fisheries Finance Program Account (FFPA)				
TO: ORF	(1)	0	0	0
FROM: Pacific Coastal Salmon Recovery	493	0	0	0
FROM: ORF	247	1,972	0	(1,972)
Subtotal, FFPA	739	1,972	0	(1,972)

	2005	2006	2007	Increase
<u>Appropriation</u>	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>	(Decrease)
Promote & Develop American Fishery Products (P&D)				
TO: ORF	(\$65,000)	(\$67,000)	(\$77,000)	(\$10,000)
FROM: Department of Agriculture	77,539	79,283	79,283	0
Subtotal, P&D	12,539	12,283	2,283	(10,000)
TOTAL TRANSFERS	91,039	52,654	79,283	26,629
Unobligated balances, rescission				
Operations, Research & Facilities (ORF)	0	(11,629)	0	11,629
Procurement, Acquisition & Construction (PAC)	0	(13,371)	0	13,371
TOTAL UNOBLIGATED BALANCES, RESCISSION	0	(25,000)	0	25,000
Mandatory Accounts				
Damage Assessment & Restoration Revolving Fund	16	1,000	1,000	0
Fisheries Finance Program Account	5,144	6,316	0	(6,316)
Environmental Improvement and Restoration Fund	6,836	8,281	8,720	439
CZMF mandatory offsetting collections	(1,637)	(3,000)	(3,000)	0
Federal Ship Financing Fund	0	(2,000)	(2,000)	0
NOAA Corps Retirement Pay	17 <b>,</b> 574	18,504	19,322	818
Limited Access System Administration Fund	3,040	7,444	7,444	0
TOTAL BUDGET AUTHORITY	4,058,739	4,027,320	3,794,916	(232,404)
Mandatory Funds	108,512	115,828	110,769	(5,059)
Discretionary Budget Authority				
Operations, Research & Facilities (ORF)	2,872,493	2,801,849	2,667,843	(134,006)
P&D Transfer	(65,000)	(67,000)	(77,000)	(10,000)
Procurement, Acquisition & Construction (PAC)	1,051,859	1,106,172	1,024,467	(81,705)
Coastal Zone Management Fund	0	0	0	0
Fishermen's Contingency Fund	492	0	0	0
Marine Mammal Unusual Mortality Event Fund	800	0	0	0
Medicare-Eligible Retiree Healthcare Fund	0	1,645	2,012	367
Fisheries Finance Program Account	1,367	2,255	0	(2,255)
Pacific Coastal Salmon Recovery	88,216	66,571	66,825	254
TOTAL DISCRETIONARY	3,950,227	3,911,492	3,684,147	(227,345)
BUDGET AUTHORITY	•			( , -)

#### Adjustments to Current Programs (Adjustments to Base) – requested \$29,649,000:

Adjustments to Base (ATBs) are defined as increases or decreases to *specific object classes* that:

- 1. Represent the same level of effort as the current budget year,
- 2. Are outside of the agency management's control,
- 3. Are supported by specific documentation, and
- 4. Are a *known cost* (or fixed cost of doing business).

NOAA has requested the following increases for labor-related and non-labor ATBs:

(Dollars in Millions)

	Labor-related	Non-labor	Total
	(Salary & Benefits)	(Other Object Classes)	
NOS	\$0.8	\$0.3	\$1.1
NMFS	3.9	0.5	4.4
OAR	3.2	0.0	3.2
NWS	20.0	5.5	25.5
NESDIS	1.7	0.0	1.7
Program Support	1.7	2.2	3.9
ORF/PAC – Total	31.3	8.5	39.8
Restored Rescissions			5.2
Technical ATBs,			
Adjustments & Transfers			-9.4
Deobligations			-6.0
Total Appropriated			
(Budget Authority) ATBs	\$31.3	\$8.5	\$29.6

These increases for ATBs will help fund the agency's overall anticipated adjustments to the current programs. Program totals will fund the FY 2007 Federal pay raise of 2.2 percent and annualize the FY 2006 pay raise of 3.1 percent. In addition, program totals will also fund inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration.

## FY06 Proposed Terminations

NOAA	FY 2006
(\$ in Thousands)	Terminations
, ,	
NATIONAL OCEAN SERVICE	
EEZ Outer Continental Shelf Ocean Bottom Claims	2,170
Alaska Surveys, Current and Tide Data	3,451
MS/LA Digital Coast	986
Vessel Time Charter	11,687
Dune System Assessment & Shoreline Change Analysis	493
Coastal Environmental Mapping Consortium	789
River Studies	740
Height Modernization Regional Expansion - AL	1,943
Height Modernization Regional Expansion -TX	740
Height Modernization Study - MS	591
Geodetic Survey- KY	493
Geodetic Survey - WI	2,959
Geodetic Survey - AZ	494
Great Lakes NWLON	1,972
Ocean Assessment Program Base	8,176
Coastal OCEAN Research & Monitoring Program	493
NOAA IRWI Li 100 OL 100 TU LU CU L	7,397
NOAA/UNH Joint Ocean Observing Technology Center	1,972
Alaska Ocean Observing System	1,676
Gulf of Maine Observing System	493
Long Island Sound Observing System	986
Central Gulf of Mexico Observing System (USM)	1,972 1,480
So Cal Coastal Ocean Observing System (Scripps)  Center for Integrated Marine Technologies	2,022
Alliance for Coastal Technologies	2,022
Center for Coastal Ocean Observation and Analysis	2,466
Carolina Coastal Ocean Observing and Prediction System	2,400
Wallops Ocean Observation Project	1,972
Cook Inlet Coastal Monitoring and Habitat	986
Coastal Services Center	1,041
Mississippi Digital Earth	2,959
Pacific Coastal Services Center	3,538
Coastal Change Analysis	493
Lake Pontchartrain	1,972
CREST	986
CI-CORE	2,466
Aquatic Research Consortium MS	2,466
Hawaii Coral Reef Initiative	1,480
Florida Coral Reef	986
Coral Reef - Puerto Rico	493
National Fish and Wildlife Foundation - NFWF	690
Ocean Health Initiative	4,931
White Water to Blue Water	986

NOAA	FY 2006		
(\$ in Thousands)	Terminations		
Oregon Ocean Observing	493		
SURA Coastal Ocean Observing System	2,466		
National Maritime Center	1,972		
Lake Erie Monitoring	494		
Louisiana Long Term Estuary Assessment	986		
Mitigating Coastal Development Impacts/MS State Univ.	986		
Marine Wildlife Noise Impacts / Univ of RI	493		
Marine Debris	3,945		
Marine Debris Removal - Alaska	1,233		
Aquatic Resources	4,438		
Vieques	986		
Center for Marine Spill Response Project	2,959		
Center for Coastal Environmental Health & Biomolecular Rsrch	7,140		
Oxford, MD	2,908		
Center for Sponsored Coastal Ocean Research	1,263		
	779		
NCCOS Headquarters  Marine Environmental Health Bareh Lab (MEHRL)			
Marine Environmental Health Rsrch Lab (MEHRL) CZM Grants	114		
	2,117		
Non-point Pollution Implementation Grants	2,959		
Baldwin Educational Program	986		
Northeast Hawaiian Islands Rsrch / HI Institute of Marine Biology	2,220		
Northwest Straits Citizens Advisory Commission	1,381		
Armand Bayou and Genoa-Red Bluff, TX	345		
Maumee River Basin, Ohio	1,479		
Orange Beach (Robinson Island), AL	789		
Moose Mountain	986		
Newfields	1,972		
Winnicut Headwaters	1,479		
Twelve Oaks	887		
Grand River Big Pond	306		
Eastern Shore	542		
Jamestown	1,972		
Sowams Property	986		
Maquoit Bay	542		
South Carolina Coastal Inititative	1,479		
Babcock Ranch	2,959		
Chesapeake Bay	3,945		
Blackbird Creek Reserve	1,479		
Tuniper's Pond	494		
Detroit Riverfront West	2,959		
Potter Creek/Otis Bogs	494		
Piedras Blancas	494		
Herring River	494		
Elmer's Island	247		
Tchefuncte Marsh	197		
Webster Woods	740		
Commencement Bay	1,529		

NOAA	FY 2006
(\$ in Thousands)	Terminations
Coastal Ecosystems (Mobile & Baldwin)	4,931
Pond Brook	1,332
Ferolbink Farm	494
Common Pasture	247
Hidalgo Park	346
Brays Bayou	395
Oswegatchie Hills	875
Texas NERR	4,375
Great Bay Partnership, NH	5,917
Village Point Park Preserve	986
Channel Islands National Marine Sanctuary	2,959
Flower Gardens Banks Patrol Craft	3,156
Small Boats	4,931
Thunder Bay NMS Exhibit	986
Monterey Bay National Marine Sanctuary	1,479
Gulf of Farralones	2,466
Down East Inst. For Marine Research (ME)	986
Conservation Institute	4,931
Center for Aquatic Resource Management	5,917
Pascagoula River Basin Estuarine Center	1,479
Oxford Cooperative Lab	1,480
Gulf Coast Marine Aquaculture Laboratory	5,917
TOTAL NOS	221,765
NATIONAL MARINE FISHERIES SERVICE	
Marine Mammals	18,883
Hawaiian Sea Turtles	4,468
Western Alaska Salmon Stock Identification	197
Atlantic Cooperative Management	1,874
Fish Information Networks	1,149
Chesapeake Bay	690
Other fisheries-related projects	17,061
Sustainable Habitat Management	6,904
Fisheries Habitat Restoration	11,162
Chesapeake Bay Studies	1,545
Cooperative Research:	9,862
Other projects:	11,095
AK Composite Research and Development Program	18,969
Acquatic Resources	4,437
Pascagoula Lab	1,945
Center for Ecosystem Base Fish Management	4,931
Barrow Arctic Research Center	5,917
Fisheries Finance Program Account (Discretionary & Mandatory)	8,571
TOTAL NMFS	129,660
NOAA RESEARCH	
Laboratories & Joint Institutes	3,001

NOAA	FY 2006		
(\$ in Thousands)	Terminations		
East Tennessee Ozone Study	296		
Climate System Research Center	740		
Univ of AL Huntsville Climate Research	986		
Abrupt Climate Change Research	247		
Drought Research Study	986		
Coastal Vulnerability to Climate Change	1,480		
Center for Urban Environmental Research	986		
Advanced Study Institute for Environmental Prediction	1,479		
NOAA Joint Institute for Northern Gulf of Mexico	2,959		
Tornado Severe Storm Research / Phased Arrary Radar	2,957		
New England Air Quality Study	2,959		
NE Center for Atmospheric Science and Policy	1,480		
Inst. for Study of Earth, Oceans & Space (Air-Map - CCRC)	4,931		
Risk Reduction in Water Forecasts (MSU)	1,972		
Remote Sensing Research (ISU/BCAL)	493		
STORM (U. of N. Iowa)	641		
Central CA Air Quality Study	370		
Great Plains Center for Atmosphere and Human Health	986		
Urbanet	5,917		
High Altitude Air Study	346		
Reducing Wind-Induced Damages from Storms	986		
Targeted Wind Sensing	1,972		
Coordinate NASA-NOAA Severe Storm R&D	1,972		
Laboratories & Cooperative Institutes	2,957		
National Sea Grant Law Center	896		
National Institute for Undersea Science and Technology	4,931		
Exploration Autonomous Underwater Vehicle	494		
Marine Aquaculture Program	2,959		
Aquatic Ecosystems - Canaan Valley Institute	5,917		
Atmospheric Dispersion Forecasting / Jackson State Univ.	1,480		
Gulf of Maine Council	740		
Lake Champlain Research Consortium	346		
NISA/Ballast Water Demonstrations	2,959		
NISA/Alaska	1,480		
Invasive Milfoil	246		
HI Micronesia Invasive Species Program	493		
Cooperative Institute for New England Mari-culture and Fisheries	1,972		
Pacific Tropical Ornamental Fish	493		
Center for Aquaculture Development	986		
West Alabama Shrimp Acquaculture Program	493		
Urban Coastal Institute	493		
Lake Champlain Emerging Threats	493		
Center for the Environment	789		
Bio-screening Technology for Imported Seafood	986		
C	73,745		
IOTAD NOAA REGEARCH	73,745		
TOTAL NOAA RESEARCH NATIONAL WEATHER SERVICE	7.		

NOAA	FY 2006		
(\$ in Thousands)	<b>Terminations</b>		
Tsunami Warning & Environmental Obs for AK (TWEAK)	1,972		
Hurricane Mitigation Alliance (SUSF)	2,071		
Susquehanna River Basin Flood System	1,972		
Vermont Northeast Weather & Wind Data Integration	217		
Strengthen U.S. Tsunami Warning Network	128		
Coastal & Inland Hurricane Monitoring & Prediction Program	1,480		
Coastal Weather Monitoring for Catastrophic Events	468		
Western Kentucky Environmental Monitoring Network	1,479		
National Data Bouy Center	1,740		
Shenandoah Air Quality Forecasting	1,726		
Sea Level Monitoring & Tide Guage Network	237		
NOAA Weather Radio Transmitters - MS	197		
NOAA Weather Radio Transmitters - AI	50		
AWIPS	571		
Radiosonde Network Replacement	1,972		
NOAA Center for Weather & Climate Prediction (NCEP)	30		
TOTAL NWS	16,310		
NESDIS			
Research to Ops/NOAA-NASA Partnerships	3,945		
Global Wind Demo	2,667		
Remote Sensing Cetner	1,972		
Regional Climate Centers	2,959		
NOAA's Data Centers & Information Services - KY	5,647		
NOAA's Data Centers & Information Services - MD	3,930		
NOAA's Data Centers & Information Services - WV	5,537		
International Pacific Research Ctr (U of H)	1,972		
Integrated Environmeantal Applications & Information Center	2,959		
National Climatic Data Center - GOES Date Archive Project	2,466		
National Climatic Data Center - Prototyping Data Grids	296		
EOS & Advanced Polar Data Processing, Distribution& A Archiving Systems	1,960		
CIP - single point of failure	37		
Comprehensive Large Array Data Stewardship Sys (CLASS)	2,335		
TOTAL NESDIS	38,682		
	<u> </u>		
PROGRAM SUPPORT / OMAO			
NOAA Education Program / Education Initiative	6,283		
Hollings Scholarship	3,962		
JASON Education and Outreach	1,466		
BWET Hawaii	1,480		
BWET California	1,972		
BWET Chesapeake Bay	3,452		
Hawaii Humpback Education Program	1,726		
Gulf Coast Exploreum	986		
Chesapeake Bay Interpretive Buoys	493		
Narragansett Bay Marine Education (Save the Bay)	493		
Data Acquisition	7,936		

NOAA	FY 2006
(\$ in Thousands)	Terminations
OE and NOAA Corps Pay Differential	1,479
Fleet Planning and Maintenance	2,071
NOAA ICOSS Observing Systems (NOS)	8,876
Convert NOAA Weather Bouys with NDBC (NOS)	3,945
Pacific Region Center	19,725
Small Waterplane Area Twin Hull Vessel (SWATH) & Mission Equipment	3,945
Upgrades: NANCY FOSTER/OSCAR	
DYSON/HI'IALAKAI/FAIRWEATHER	24
Fisheries Survey Vessel Replacement #2	2,466
Fisheries Survey Vessel #3	5,425
Fisheries Survey Vessel #4	11,539
AUV Sensors	2,959
TOTAL PROGRAM SUPPORT / OMAO	92,703

NOAA (\$ in Thousands)	FY 2006 One-time Projects Terminations
NATIONAL MARINE FISHERIES SERVICE	
Pascagoula Lab	13,200
TOTAL NMFS	13,200
NOAA RESEARCH	
Competitive Research Program	328
Laboratories & Cooperative Institutes	1,344
TOTAL NOAA RESEARCH	1,672
NATIONAL WEATHER SERVICE	
Local Warnings and Forecasts	8,870
WFO Maintenance	990
Central Forecast Guidance	2,000
ASOS	3,900
NEXRAD	1,000
All Hazard National Warning Network: NOAA Weather Radio	2,000
Strengthen U.S. Tsunami Warning Network	3,800
TOTAL NWS	22,560
NESDIS	
Coastal Data Development	868
TOTAL NESDIS	868
PROGRAM SUPPORT / OMAO	
Data Acquisition	250
Aircraft Services	2,550
Aircraft Equipment and Technology Refreshment	4,500
Third WP-3D Navigation	9,000
TOTAL PROGRAM SUPPORT	16,300

#### NOAA MARINE AND AVIATION OPERATIONS

#### Planned Fiscal Year 2007 Operating Days of Ship Support for NOAA Programs

Operating days are days that a ship is away from home port and engaged in a project including days in any port other than home port or days transiting to or from a project. Days at sea are days that a ship is at sea engaged in a project or days transiting to or from a project.

The private sector and University National Oceanographic Laboratory System (UNOLS) ships generally track operating days rather than days at sea, so all days in the table below, including in-house ships days, are operating days. Operating days are typically 10 to 15 percent higher than days at sea.

<u>(</u>	<b>Operating Days</b>	<b>Dollars in Millions</b>			
<u>In-house</u>	4,650	\$ 94.1 Operations \$ 16.1 Fleet Planning & Maint.			
In-house subtotal	4,650	\$ 110.2			
Outsourced					
Private Sector	2,600	\$15.0			
UNOLS	560	\$13.5			
Time Charter	220	\$11.8			
Contracts for hydrographic data		\$21.0			
Outsourced subtotal	3,380	\$61.3			
<b>Grand Total</b>	==== 8,030	==== \$171.5			

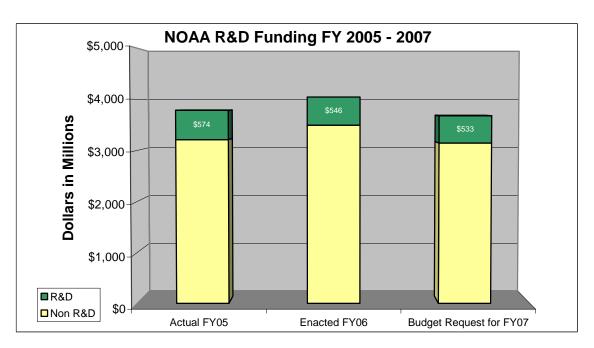
#### **NOAA** Research and Development

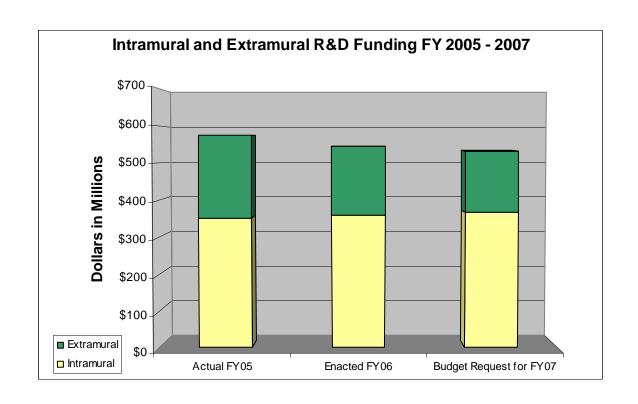
Research and development (R&D) play vital roles in enabling NOAA to accomplish its science-based missions to predict changes in Earth's environment and to conserve and manage coastal and marine resources.

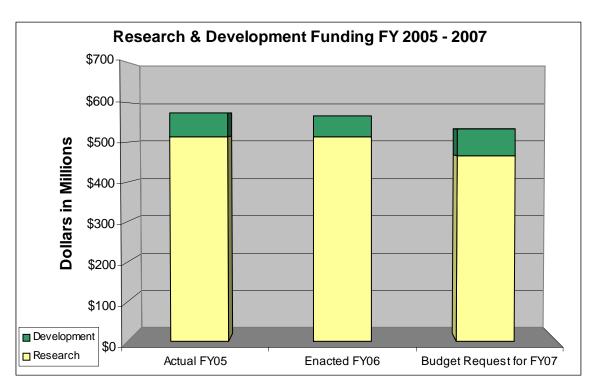
The following charts display the scope and nature of R&D at NOAA. Key elements include the following for FY 2007:

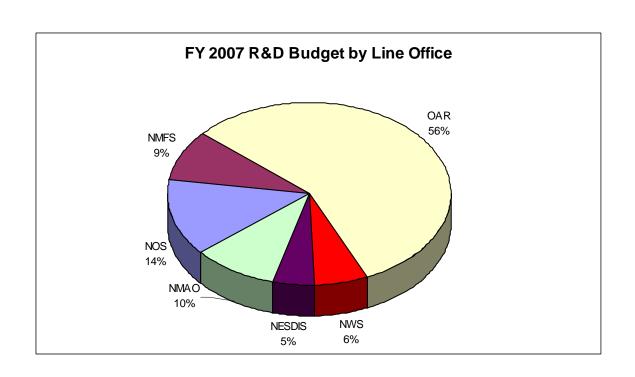
- R&D represents 13.9% of total NOAA funding in FY 2007.
- 69% of NOAA's R&D is intramural and 31% extramural.
- NOAA's R&D budget is 87% research and 13% development.
- NOAA's Office of Oceanic and Atmospheric Research (OAR, also known as "NOAA Research") manages 56% of NOAA's R&D. The remainder is distributed among NOAA's operational units.
- Major R&D efforts are supported by three of NOAA's mission goals: Ecosystems (37%), Climate (30%), and Weather & Water (19%). 0% is focused on Commerce & Transportation. The 14% conducted for "Mission Support" primarily provides research vessels for research.

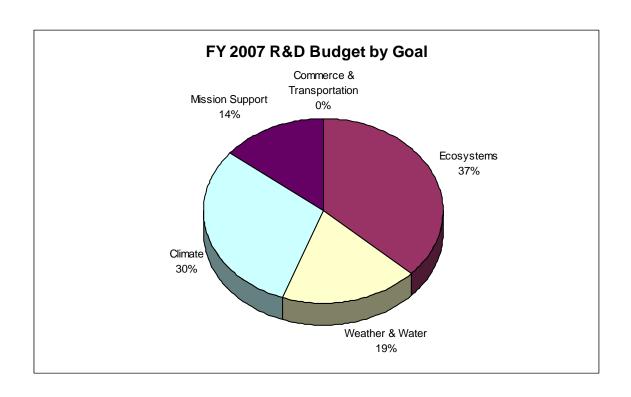
#### **NOAA** Research and Development











### NATIONAL OCEAN SERVICE (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted	FY 2006 Terminations Amount	FY 2007 Total ATBs	FY 2007 Base Amount	FY 2007 Program Changes Amount	FY 2007 Pres. Bud Request
Navigation Services							
Mapping & Charting							
Mapping & Charting Base	27,233	38,350	0	(1,621)	36,729	5,110	41,839
Mapping & Charting Base	0	0	0	1,879	1,879	0	1,879
Coastal Mapping	493	0	0	0	0	0	0
Joint Hydrographic Center	7,492	7,397	0	27	7,424	0	7,424
Marine Modeling & Geospatial Technology	1,084	0	0	0	0	0	0
Hydrographic Surveys	1,282	0	0	0	0	0	0
Electronic Navigational Charts	4,239	4,241	0	(3)	4,238	1,890	6,128
Nautical Charting	6,406	0	0	0	0	0	0
Navigational Services	1,858	0	0	0	0	0	0
Shoreline Mapping	2,413	2,415	0	9	2,424	0	2,424
Chesapeake Bay	986	0	0	0	0	0	0
Aerial	986	0	0	0	0	0	0
Payment to OMAO	2,753	0	0	0	0	0	0
Address Survey Backlog/Contracts	18,727	20,711	0	(25)	20,686	10,487	31,173
EEZ Outer Continental Shelf Ocean Bottom Claims	2,168	2,170	2,170	0	0	0	0
Alaska Surveys, Current and Tide Data	2,463	3,451	3,451	0	0	0	0
North Pacific	986	0	0	0	0	0	0
North Pacific Maritime Boundary Line	986	0	0	0	0	0	0
MS/LA Digital Coast	789	986	986	0	0	0	0
Vessel Time Charter	1,971	11,687	11,687	0	0	0	0
Dune System Assessment & Shoreline Change Analysis	;	493	493	0	0	0	0
Coastal Environemental Mapping Consortium		789	789	0	0	0	0
River Studies		740	740	0	0	0	0
Subtotal, Mapping and Charting	85,315	93,430	20,316	266	73,380	17,487	90,867
Geodesy							
Geodesy Base	20,004	20,016	0	2,013	22,029	(300)	21,729
National Spatial Reference System	1,971	1,943	0	(1,943)	0	0	0
Height Modernization Regional Expansion - NGS Impl	247	230	0	1	231	0	231
Height Modernization Regional Expansion - AL		1,943	1,943	0	0	0	0
Height Modernization Regional Expansion - NC	986	920	0	4	924	0	924
Height Modernization Regional Expansion -CA	493	920	0	4	924	0	924
Height Modernization Regional Expansion -TX	739	740	740	0	0	0	0
Height Modernization Regional Expansion - SC	0	461	0	1	462	0	462
Height Modernization Study - MS	591	591	591	0	0	0	0
Geodetic Survey- CA	0	0	0	0	0	0	0
Geodetic Survey- KY	493	493	493	0	0	0	0
Geodetic Survey- LA	490	0	0	0	0	0	0
Geodetic Survey - WI	2,957	2,959	2,959	0	0	0	0
Geodetic Survey - WA	493	0	0	0	0	0	0
Geodetic Survey - AL	1,971	0	0	0	0	0	0
Geodetic Survey - AZ  Geodetic Survey - AZ	1,5/1	494	494	0	0	0	0
Subtotal, Geodesy	31,435	31,710	7,220	80	24,570	(300)	24,270
Subtotal, Geodesy	31,433	31,710	7,220	80	24,570	(300)	24,270
Tide & Current Data							
Tide & Current Data Tide & Current Data Base	18,401	18,161	0	3,866	22,027	715	22,742
Tide & Current Data Base Tide & Current Data Base	18,401	18,101	0	228	22,027	2,000	2,742
National Water Level Observation Network	2,463	2,466	0	(2,466)	0	2,000	2,228
			0		0	0	-
PORTS Great Lakes NWLON	2,938	1,479	-	(1,479)	0	0	0
	1,971	1,972	1,972 0	0	0	0	0
Alaska Current & Tide Data	1,479	0					
Subtotal, Tide & Current Data	27,252	24,078	1,972	149	22,255	2,715	24,970
Total, Navigation Services	144,002	149,218	29,508	495	120,205	19,902	140,107
Total, Ivavigation Services	144,002	149,210	23,300	493	120,203	19,902	140,107
Ocean Resources Conservation and Assessment							
Ocean Assessment Program (OAP)							
Ocean Assessment Program (OAP) Ocean Assessment Program Base	22,003	8,176	8,176	0	0	0	0
=	2,146	8,176	8,176	0	0	0	0
Coastal Ocean Research & Monitoring Program		-	-	0	0	0	0
Coastal Ocean Research & Monitoring Program	2,438	493	493	-	0	0	0
NOAA (INIL Isint Ossan Obsanin Taskusland Cart	7,392	7,397	7,397	0		-	Ü
NOAA/UNH Joint Ocean Observing Technology Center	3,942	1,972	1,972	0	0	0	0
Alaska Ocean Observing System	1,971	1,676	1,676	0	0	0	0
					0	0	0
Gulf of Maine Observing System	1,873	493	493	0	-	-	-
Gulf of Maine Observing System Long Island Sound Observing System	986	986	986	0	0	0	0
Gulf of Maine Observing System				-	-	-	-

### NATIONAL OCEAN SERVICE (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN	FY2005 Enacted	FY 2006 Enacted	FY 2006 Terminations	FY 2007 Total	FY 2007 Base	FY 2007 Program	FY 2007 Pres. Bud
Operations, Research and Facilities	"Currently Available BA"			ATBs		Changes	Request
C + C I + + 1M : T   1   1	Amount	Amount	Amount	Amount	Amount	Amount	Amount
Center for Integrated Marine Technologies Alliance for Coastal Technologies	0 2,463	2,022 2,959	2,022 2,959	0	0	0	
Center for Coastal Ocean Observation and Analysis	2,463	2,466	2,466	0	0	0	
Carolina Coastal Ocean Observing and Prediction Syste	2,463	2,400	2,022	0	0	0	
Wallops Ocean Observation Project	1,971	1,972	1,972	0	0	0	
Coastal Ocean Monitoring Network for West Florida	739	0	0	0	0	0	
Coastal Storms	2,463	1,233	0	(12)	1,221	1,653	2,87
Cook Inlet Coastal Monitoring and Habitat	986	986	986	0	0	0	2,07
Coastal Services Center	22,672	19,725	1,041	(4,176)	14,508	0	14,50
Coastal Services Center	0	0	0	4,950	4,950	0	4,95
Digital Earth Model - MS	_	2,959	2,959	0	0	0	.,,,
Pacific Coastal Services Center	2,218	4,438	3,538	(900)	0	0	
Seacoast Science Center	986	0	0	0	0	0	
EE Jusi Environmental Institute	739	0	0	0	0	0	
Coastal Change Analysis	493	493	493	0	0	0	
Lake Pontchartrain	1,479	1,972	1,972	0	0	0	
CREST	444	986	986	0	0	0	
CI-CORE	2,463	2,466	2,466	0	0	0	
Aquatic Research Consortium MS	2,463	2,466	2,466	0	0	0	
Coop Institute for Coastal and Estuarine Enviro Tech (	6,702	6,706	0	(63)	6,643	0	6,6
Hawaii Coral Reef Initiative	1,479	1,480	1,480	0	0,049	0	0,0
Florida Coral Reef	986	986	986	0	0	0	
Coral Reef - Puerto Rico	493	493	493	0	0	0	
Coral Reef Program	24,643	24,656	0	84	24,740	962	25,70
National Fish and Wildlife Foundation - NFWF	689	690	690	0	24,740	0	23,7
Ocean Health Initiative	17,742	4,931	4,931	0	0	0	
Monterey Bay Watershed	493	4,931	4,931	0	0	0	
* *	493	986	986	0	0	0	
White Water to Blue Water	U	493	493	0	0	0	
Oregon Ocean Observing				0	0	0	
SURA Coastal Ocean Observing System		2,466 1,972	2,466 1,972	0	0	0	
National Maritime Center		494	494	0	0	0	
Lake Erie Monitoring		986	986	0	0	0	
Louisiana Long Term Estuary Assessment  Subtotal, Ocean Assessment Program (OAP)	146,933	121,149	68,970	(117)	52,062	2,615	54,67
outotally occur 1255cs5ment 110gram (0.11)	110,500	121,119	00,570	(11.)	22,002	2,010	<u> </u>
Response and Restoration							
Response and Restoration Base	11,238	10,454	0	(4,236)	6,218	2,794	9,0
Response and Restoration Base	0	0	0	7,309	7,309	0	7,30
Estuarine and Coastal Assessment	0	0	0	0	0	0	· ·
Estuary Restoration Program	1,183	1,184	0	4	1 100	_	
-		1,104	U	4	1.100	0	1.1
Damage Assessment Program				-	1,188	-	1,1
Damage Assessment Program  Coastal Protection and Restoration Project	2,250	2,959	0	(2,959)	0	0	1,1
Coastal Protection and Restoration Project	2,250 395	2,959 0	0 0	-		-	1,1
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un	2,250 395 986	2,959 0 986	0 0 986	(2,959) 0 0	0 0 0	0 0 0	1,1
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI	2,250 395 986 98	2,959 0 986 493	0 0 986 493	(2,959) 0 0 0	0 0 0 0	0 0 0 0	1,1
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Uni Marine Wildlife Noise Impacts / Univ of RI Marine Debris	2,250 395 986 98 4,928	2,959 0 986 493 3,945	0 986 493 3,945	(2,959) 0 0 0 0	0 0 0 0	0 0 0 0	1,1
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Uni Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska	2,250 395 986 98 4,928 1,183	2,959 0 986 493 3,945 1,233	0 986 493 3,945 1,233	(2,959) 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	1,1
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Uni Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC	2,250 395 986 98 4,928 1,183 197	2,959 0 986 493 3,945 1,233 0	0 986 493 3,945 1,233	(2,959) 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	1,1
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program	2,250 395 986 98 4,928 1,183 197 1,595	2,959 0 986 493 3,945 1,233 0	0 0 986 493 3,945 1,233 0	(2,959) 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	1,1
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative	2,250 395 986 98 4,928 1,183 197 1,595 4,928	2,959 0 986 493 3,945 1,233 0 0 4,438	0 0 986 493 3,945 1,233 0 0 4,438	(2,959) 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	1,1
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986	2,959 0 986 493 3,945 1,233 0 0 4,438 986	0 986 493 3,945 1,233 0 0 4,438 986	(2,959) 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	1,1
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959	0 986 493 3,945 1,233 0 0 4,438 986 2,959	(2,959) 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903	0 986 493 3,945 1,233 0 0 4,438 986 2,959	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	7,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959	0 986 493 3,945 1,233 0 0 4,438 986 2,959	(2,959) 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	7,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903	0 986 493 3,945 1,233 0 0 4,438 986 2,959	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	7,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration National Centers for Coastal Ocean Science (NCCOS)	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24	0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 7 2 1,642	0 0 0 0 0 0 0 0 0 0 0	7,2 <b>24,</b> 7
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup  Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) National Centers for Coastal Ocean Science (NCCOS)	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540	0 986 493 3,945 1,233 0 0 4,438 986 2,959	(2,959) 0 0 0 0 0 0 0 0 0 0 0 142	0 0 0 0 0 0 0 0 0 0 0 0 0 5,927 21,642	0 0 0 0 0 0 0 0 0 0 0 0 3,094	7,2 <b>24,7</b> 31,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) National Centers for Coastal Ocean Science (NCCOS) Extramural Research	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 9,862	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 5,927 21,642	0 0 0 0 0 0 0 0 0 0 300 3,094	7,2 <b>24,7</b> 31,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) National Centers for Coastal Ocean Science (NCCOS) Extramural Research Center for Coastal Environmental Health & Bimolecula	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 9,862 14,794	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21) (7,654)	0 0 0 0 0 0 0 0 0 0 6,927 21,642	0 0 0 0 0 0 0 0 0 0 0 0 3,094	7,2 24,7 31,2 15,8
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup  Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) National Centers for Coastal Ocean Science (NCCOS) Extramural Research Center for Coastal Environmental Health & Bimolecula Extramural Research	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 9,862 14,794 0	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21) (7,654) 0	0 0 0 0 0 0 0 0 0 0 6,927 21,642 31,231 9,841 0	0 0 0 0 0 0 0 0 0 0 300 3,094	7,2 <b>24,7</b> 31,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) Extramural Research Center for Coastal Environmental Health & Bimolecula Extramural Research High salinity estuaries (Baruch)	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 9,862 14,794 0 0	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21) (7,654) 0	0 0 0 0 0 0 0 0 0 0 6,927 21,642 31,231 9,841 0 0	0 0 0 0 0 0 0 0 0 0 0 300 3,094	7,2 <b>24,</b> 7 31,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) Extramural Research Center for Coastal Environmental Health & Bimolecula Extramural Research High salinity estuaries (Baruch) Oxford, MD	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 0 9,862 14,794 0 0 4,438	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040	(2,959) 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21) (7,654) 0 0 (1,530)	0 0 0 0 0 0 0 0 0 0 0 6,927 21,642 31,231 9,841 0 0	0 0 0 0 0 0 0 0 0 0 300 3,094	7,2 <b>24,</b> 7 31,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) Rational Centers for Coastal Ocean Science (NCCOS) Extramural Research Center for Coastal Environmental Health & Bimolecula Extramural Research High salinity estuaries (Baruch) Oxford, MD Extramural Research	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 9,862 14,794 0 0 4,438 0	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21) (7,654) 0 0 (1,530) 0	0 0 0 0 0 0 0 0 0 0 0 6,927 21,642 31,231 9,841 0 0 0	0 0 0 0 0 0 0 0 0 0 300 3,094	7,2 <b>24,</b> 7 31,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) Rational Centers for Coastal Ocean Science (NCCOS) Extramural Research Center for Coastal Environmental Health & Bimolecula Extramural Research High salinity estuaries (Baruch) Oxford, MD Extramural Research Ctr for Coastal Fisheries Habitat Research	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 9,862 14,794 0 0 4,438 0 5,959	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21) (7,654) 0 0 (1,530) 0 (5,921)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 21,642	0 0 0 0 0 0 0 0 0 0 300 3,094	7,2 <b>24,</b> 7 31,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) National Centers for Coastal Ocean Science (NCCOS) Extramural Research Center for Coastal Environmental Health & Bimolecula Extramural Research High salinity estuaries (Baruch) Oxford, MD Extramural Research Ctr for Coastal Fisheries Habitat Research Extramural Research	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 9,862 14,794 0 0 4,438 0 5,921 0	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040 0 0,7,140 0 0 2,908 0	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21) (7,654) 0 0 (1,530) 0 (5,921)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 300 3,094	7,2 <b>24,</b> 7 31,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) National Centers for Coastal Ocean Science (NCCOS) Extramural Research Center for Coastal Environmental Health & Bimolecula Extramural Research High salinity estuaries (Baruch) Oxford, MD Extramural Research Ctr for Coastal Fisheries Habitat Research Extramural Research Center for Coastal Monitoring & Assessment	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 9,862 14,794 0 0 4,438 0 5,921 0 5,656	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040 0 0 7,140 0 0 2,908 0	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21) (7,654) 0 0 (1,530) 0 (5,921) 0 (5,656)	0 0 0 0 0 0 0 0 0 0 6,927 21,642 31,231 9,841 0 0 0 0	0 0 0 0 0 0 0 0 0 0 300 3,094	7,2 <b>24,</b> 7 31,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup  Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) National Centers for Coastal Ocean Science (NCCOS) Extramural Research Center for Coastal Environmental Health & Bimolecula Extramural Research High salinity estuaries (Baruch) Oxford, MD Extramural Research Ctr for Coastal Fisheries Habitat Research Extramural Research Center for Coastal Monitoring & Assessment Extramural Research	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837 14,786 3,942 986 4,436 1,971 5,667 1,971 5,914 1,971	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 9,862 14,794 0 0 4,438 0 5,959 6,903 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040 0 0 7,140 0 0 2,908 0 0	(2,959) 0 0 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21) (7,654) 0 0 (1,530) 0 (5,921) 0 (5,656)	0 0 0 0 0 0 0 0 0 0 6,927 21,642 31,231 9,841 0 0 0 0	0 0 0 0 0 0 0 0 0 0 300 3,094	7,2 <b>24,</b> 7 31,2
Coastal Protection and Restoration Project Mitigating Coastal Development Impacts/MS State Un Marine Wildlife Noise Impacts / Univ of RI Marine Debris Marine Debris Removal - Alaska Marine Debris Removal - SC Hazardous Materials Response Program Aquatic Resources Environmental Initiative Vieques Center for Marine Spill Response Project Pribilof Islands Cleanup Subtotal, Response and Restoration  National Centers for Coastal Ocean Science (NCCOS) National Centers for Coastal Ocean Science (NCCOS) Extramural Research Center for Coastal Environmental Health & Bimolecula Extramural Research High salinity estuaries (Baruch) Oxford, MD Extramural Research Ctr for Coastal Fisheries Habitat Research Extramural Research Center for Coastal Monitoring & Assessment	2,250 395 986 98 4,928 1,183 197 1,595 4,928 986 1,971 6,899 38,837	2,959 0 986 493 3,945 1,233 0 0 4,438 986 2,959 6,903 36,540 0 9,862 14,794 0 0 4,438 0 5,921 0 5,656	0 0 986 493 3,945 1,233 0 0 4,438 986 2,959 0 15,040 0 0 7,140 0 0 2,908 0	(2,959) 0 0 0 0 0 0 0 0 0 0 0 24 142 31,231 (21) (7,654) 0 0 (1,530) 0 (5,921) 0 (5,656)	0 0 0 0 0 0 0 0 0 0 6,927 21,642 31,231 9,841 0 0 0 0	0 0 0 0 0 0 0 0 0 0 300 3,094	7,2 <b>24,</b> 7 31,2

### NATIONAL OCEAN SERVICE (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted Amount	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base	FY 2007 Program Changes Amount	FY 2007 Pres. Bud Request
Marine Env Health Research Lab - MEHRL	3,942	3,945	114	(3,831)	0	0	0
Subtotal, NCCOS	59,582	53,196	12,204	80	41,072	5,960	47,032
Total, Ocean Resources Conserv. & Assess.	245,352	210,885	96,214	105	114,776	11,669	126,445
Ocean and Coastal Management							
Coastal Management							
CZM Grants	66,039	66,080	2,117	(666)	63,297	2,849	66,146
CZM Program Administration	6,604	6,607	0	370	6,977	628	7,605
National Estuarine Research Reserve System	16,165	16,175	0	56	16,231	575	16,806
Non-point Pollution Implementation Grants	2,957	2,959	2,959	0	0	0	0
Baldwin Educational Program		986	986	0	0	0	0
Marine Protected Areas	2,957	1,480	0	(2)	1,478	650	2,128
Subtotal, Coastal Management	94,722	94,287	6,062	(242)	87,983	4,702	92,685
Ocean Management Marine Sanctuary Program							
Marine Sanctuary Program Base	50.319	35,160	0	58	35,218	0	35,218
Marine Sanctuary Frogram Base  Marine Sanctuary Foundation / Ocean Activity Fund	4,928	33,100	0	0	33,218	0	33,218
Northeast Hawaiian Islands Rsrch / HI Institute of Mar	1,479	2,220	2,220	0	0	0	0
Northwest Straits Citizens Advisory Commission	1,232	1,381	1,381	0	0	0	0
Subtotal, Ocean Management	57,958	38,761	3,601	58	35,218	0	35,218
Subtotal, Ocean Management	31,930	30,701	3,001	36	33,216	<u> </u>	33,210
Total, Ocean and Coastal Management	152,680	133,048	9,663	(184)	123,201	4,702	127,903
,	,,,,,,	222,510	,,,,,,	(101)		.,,,,,,	22.,500
Total, National Ocean Service - ORF	542,034	493,151	135,385	416	358,182	36,273	394,455
Other National Ocean Service Accounts						_	
Total, National Ocean Service - PAC	126,261	91,311	86,380	(58)	4,873	7,800	12,673
Total, National Ocean Service - Other	16	6,000	0	0	6,000	0	6,000
GRAND TOTAL NATIONAL OCEAN SERVICE	668,311	590,462	221,765	358	369,055	44,073	413,128

### NATIONAL MARINE FISHERIES SERVICE (\$ in Thousands)

	FY2005	FY 2006	FY 2006	FY 2007	FY 2007	FY 2007	FY 2007
FY 07 PROPOSED OPERATING PLAN	Enacted	Enacted	Terminations	Total	Base	Program	Pres. Bud
Operations, Research and Facilities	"Currently	Liacted	Terminations	ATBs	Base	Changes	Request
operations, research and racinites	Available BA''			Albs		Changes	Request
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
Protected Species Research and Management							
Protected Species Research and Management Programs	26,266	25,741	0	251	25,992	5,825	31,817
Marine Mammals	81,504	40,212	18,883	22	21,351	1,759	23,110
Marine Turtles	14,943	13,438	4,468	26	8,996	650	9,646
Other Protected Species (Marine Fish, Plants, and Investigation		4,932	0	0	4,932	3,153	8,085
Atlantic Salmon	5,183	4,375	0	30	4,405	1,445	5,850
Pacific Salmon (for Salmon Management Activities, se Subtotal, Protected Species Research and Management	45,170 <b>175,530</b>	56,341 <b>145,039</b>	197 <b>23,548</b>	608 937	56,752 <b>122,428</b>	9,664 <b>22,496</b>	66,416 <b>144,924</b>
Subtotal, Frotected Species Research and Management	175,530	143,039	23,546	931	122,420	22,490	144,924
		0					
Fisheries Research and Management		0					
Fisheries Research and Management Programs	123,209	123,347	0	1,444	124,791	6,829	131,620
Expand Annual Stock Assessments - Improve Data Col	20,501	24,457	0	93	24,550	7,550	32,100
Economics & Social Sciences Research	4,041	4,043	0	(32)	4,011	6,518	10,529
Salmon Management Activities	27,747	24,135	0	1,984	26,119	(1,905)	24,214
Regional Councils and Fisheries Commissions	24,641	25,051	1,874	88	23,265	3,047	26,312
Fisheries Statistics	12,587	12,596	0	205	12,801	0	12,801
Fish Information Networks	21,970	21,249	1,149	(25)	20,075	2,109	22,184
Survey and Monitoring Projects	23,877 0	14,579 493	690 0	166	14,055	1,168 500	15,223 990
Fisheries Oceanography American Fisheries Act	6,037	493	0	(3)	490	500	990
Interjurisdictional Fisheries Grants	2,464	2,554	0	11	2,565	0	2,565
National Standard 8	984	986	0	10	996	0	996
Reduce Fishing Impacts on Essential Fish Habitat (EFF	493	493	0	6	499	0	499
Reducing Bycatch	3,745	2,761	0	21	2,782	0	2,782
Anadromous Grants	1,971	1,972	0	8	1,980	100	2,080
Product Quality and Safety	7,392	6,631	0	136	6,767	0	6,767
Other fisheries-related projects:	16,214	17,061	17,061				
Subtotal, Fisheries Research and Management	297,873	282,408	20,774	4,112	265,746	25,916	291,662
Enforcement & Observer Tradicion							
Enforcement & Observers/Training Enforcement	45,824	49,500	0	422	49,922	3,979	53,901
Observers/Training	24,523	23,175	0	127	23,302	3,494	26,796
Subtotal, Enforcement & Observers/Training	70,347	72,675	0	549	73,224	7,473	80,697
· · · · · · · · · · · · · · · · · · ·					-		
Habitat Conservation & Restoration							
Sustainable Habitat Management	19,910	21,796	6,904	170	15,062	3,698	18,760
Fisheries Habitat Restoration	33,338	24,833	11,162	(35)	13,636	7,500	21,136
Subtotal, Habitat Conservation & Restoration	53,248	46,629	18,066	135	28,698	11,198	39,896
Other Activities Supporting Fisheries							
Antarctic Research	1,446	1,448	0	19	1,467	0	1,467
Center for Marine Education and Research (MS) (move	2,957	0	0	0	0	0	0
Chesapeake Bay Studies	3,449	3,452	1,545	(1)	1,906	0	1,906
Climate Regimes & Ecosystem Productivity	1,478	1,478	0	5	1,483	501	1,984
Computer Hardware and Software - FY 2004 Omnibus	3,335	1,972	0	0	1,972	1,383	3,355
Cooperative Research	19,173	19,232	9,862	53	9,423	994	10,417
Information Analyses & Dissemination	17,686	17,461	0	297	17,758	626	18,384
Magnuson-Stevens (MSA) Implementation off Alaska	7,018	0	0	0	0	0	0
Marine Resources Monitoring, Assessment & Prediction	1,232	839	0	3	842	0	842
National Environmental Policy Act (NEPA)	2,957	7,890	0	66	7,956	0	7,956
NMFS Facilities Maintenance Southeast Area Monitoring & Assessment Program (SE	0 1,366	3,945 1,365	0	15 (28)	3,960 1,337	0 3,753	3,960 5,090
Other Projects	17,420	1,363	11,095	(28)	1,337	3,733	3,090
Subtotal, Other Activities Supporting Fisheries	79,517	<b>70,177</b>	22,502	429	48,104	7,257	55,361
, , , , ,	ĺ	,	Í		Í	ĺ	ĺ
AK Composite Research and Development Program		50,298	18,969	(1,605)	29,724	6,724	36,448
Total, National Marine Fisheries Service - ORF	676,515	667,226	103,859	4,557	567,924	81,064	648,988
Other Netteral Manter Billions Co.							
Other National Marine Fisheries Service Accounts Total, National Marine Fisheries Service - PAC	31,048	30,444	30,444	0	0	0	0
Total, National Marine Fisheries Service - PAC Total, National Marine Fisheries Service - Other	115,487	106,150	8,571	(10,107)	87,913	0	87,913
GRAND TOTAL NATIONAL MARINE FISHERIES S	823,050	803,820	142,874	(5,550)	655,837	81,064	736,901

	FY2005	FY 2006	FY 2006	FY 2007	FY 2007	FY 2007	FY 2007
FY 07 PROPOSED OPERATING PLAN	Enacted	Enacted	Terminations	Total	Base	Program	Pres. Bud
Operations, Research and Facilities	"Currently			ATBs		Changes	Request
	Available BA''			-		3	•
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
Climate Research							
Laboratories & Cooperative Institutes							
Laboratories & Cooperative Institutes	1,774	1,775	0	28	1,803	45	1,84
Laboratories & Cooperative Institutes	1,413	1,415	0	21	1,436	35	1,47
Laboratories & Cooperative Institutes  Subtotal, Laboratories & Cooperative Institutions	42,860 <b>46,047</b>	45,843 <b>49,033</b>	3,001 3,001	981 <b>1,030</b>	43,823 <b>47,062</b>	1,145 <b>1,225</b>	44,96 48,28
Subtotal, Euroratories & Cooperative Institutions	40,047	47,055	5,001	1,050	47,002	1,220	40,20
Climate Data & Information		2 401	0	(20)	2.252	2004	
Climate Data & Information  Subtotal, Climate Data & Information	0	2,401 <b>2,401</b>	0 <b>0</b>	(39) (39)	2,362 2,362	3,904 <b>3,904</b>	6,260
Constitution of Property							
Competitive Research Program Competitive Research Program		110,587	328	3,401	113,660	12,052	125,71
Subtotal, Competitive Research Program	0	110,587	328	3,401	113,660	12,052	125,71
Climate Or andiana							
Climate Operations Climate Operations		363	0	(5)	358	528	88
Subtotal, Climate Operations	0	363	0	(5)	358	528	88
Climate & Global Change Program							
Climate and Global Change	66,039	0	0	0	0	0	
Accelerating Climate Models - IRIS	1,478	0	0	0	0	0	
Subtotal, Climate & Global Change Program	67,517	0	0	0	0	0	
Climate Observations & Services							
Climate Observations & Services Climate Research & Observations	13,707	0	0	0	0	0	
Climate Change Research Initiative	39,427	0	0	0	0	0	
Subtotal, Climate Observations & Services	53,134	0	0	0	0	0	
Arctic Research Program Arctic Research Program	4,928	0	0	0	0	0	
Subtotal, Arctic Research Program	4,928	0	0	0	0	0	
Other Partnership Programs							
Central CA Ozone Study	247	0	0	0	0	0	
East Tennessee Ozone Study	296	296	296	0	0	0	
Climate System Research Center	739	740	740	0	0	0	
Intl Council for Local Environmental Initiatives	492	0	0	0	0	0	
Climate and Environmental Change	2,438	0	0	0	0	0	
Univ of AL Huntsville Climate Research	986 487	986 247	986 247	0	0	0	
Abrupt Climate Change Research Drought Research Study	467	986	986	0	0	0	
Coastal Vulnerability to Climate Change		1,480	1,480	0	0	0	
Center for Urban Environmental Research		986	986	0	0	0	
Advanced Study Institute for Environmental Prediction		1,479	1,479	0	0	0	
Subtotal, Other Partnership Programs	5,685	7,200	7,200	0	0	0	
Otal, Climate Research	177,311	169,584	10,529	4,387	163,442	17,709	181,15
			20,022	.,	200,000	21,100	
Weather & Air Quality Research							
Laboratories & Cooperative Institutes	24.270	25.541	1.044	1.541	25.020	2 420	20.24
Laboratories & Cooperative Institutes	34,278	35,641	1,344	1,541	35,838	2,420	38,25
NOAA Joint Institute for Northern Gulf of Mexico Subtotal, Laboratories & Cooperative Institutes	34,278	2,959 <b>38,600</b>	2,959 <b>4,303</b>	0 1,541	35,838	2,420	38,25
,			1,000			2,.20	
U.S. Weather Research Program							
U.S. Weather Research Program (USWRP) (THORPE)	493	0	0	0	0	0	
Hurricane Research and Model Improvements  Subtotal, U.S. Weather Research Program	699 1,192	0	0	0	0 <b>0</b>	0	
City in children Accounted a rogential	1,1/2		0	0		-	
Weather & Air Quality Research Programs	1.071	2045	2.057	(20)	050	2011	2.00
Tornado Severe Storm Research / Phased Arrary Radar Subtotal, Weather & Air Quality Research Programs	1,971 <b>1,971</b>	3,945 <b>3,945</b>	2,957 <b>2,957</b>	(30) (30)	958 <b>958</b>	2,014 <b>2,014</b>	2,9°
,	2,772	3,740	2,701	(55)		2,017	<u> </u>
				_	_	_	
Other Partnership Programs							i e
New England Air Quality Study	1,971	2,959	2,959	0	0	0	
New England Air Quality Study NE Center for Atmospheric Science and Policy	1,479	1,480	1,480	0	0	0	
New England Air Quality Study		,	,				

	FY2005	FY 2006	FY 2006	FY 2007	FY 2007	FY 2007	FY 2007
FY 07 PROPOSED OPERATING PLAN	Enacted	Enacted	Terminations	Total	Base	Program	Pres. Bud
Operations, Research and Facilities	"Currently			ATBs		Changes	Request
· F	Available BA''						
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
STORM (U. of N. Iowa)	640	641	641	0	0	0	0
Central CA Air Quality Study		370	370	0	0	0	0
Great Plains Center for Atmosphere and Human Health		986	986	0	0	0	0
Urbanet		5,917	5,917	0	0	0	0
High Altitude Air Study		346	346	0	0	0	0
Reducing Wind-Induced Damages from Storms		986	986	0	0	0	0
Targeted Wind Sensing	1,971	1,972	1,972	0	0	0	0
Coordinate NASA-NOAA Severe Storm R&D		1,972	1,972	0	0	0	0
Subtotal, Other Partnership Programs	13,449	25,025	25,025	0	0	0	0
Total, Weather & Air Quality Research	50,890	67,570	32,285	1,511	36,796	4,434	41,230
Total, Weather & All Quality Research	30,030	07,570	32,263	1,511	30,730	4,434	41,230
Ocean, Coastal, and Great Lakes Research							
Laboratories & Cooperative Institutes							
Laboratories & Cooperative Institutes	19,764	22,264	2,957	584	19,891	(121)	19,770
Laboratories & Cooperative Institutes	476	492	0	(492)	0	0	0
Payment to OMAO	98	0	0	0	0	0	0
Subtotal, Laboratories & Cooperative Institutes	20,338	22,756	2,957	92	19,891	(121)	19,770
N. 10. 0. 10. 7							
National Sea Grant College Program			_				
National Sea Grant College Program Base	57,169	49,310	0	234	49,544	741	50,285
Fish Extension	1,478	986	0	4	990 990	0	990
Aquatic Nuisance Species/Zebra Mussel Research Gulf of Mexico Oyster Initiative	986 986	986 986	0	4	990	0	990 990
Marine Invasive Species Program	247	980	0	0	990	0	990
National Sea Grant Law Center	247	1,480	896	14	598	0	598
Oyster Disease Research	986	986	0	4	990	0	990
Subtotal, National Sea Grant College Program	61,852	54,734	896	264	54,102	741	54,843
	, , , ,	, ,					, , ,
National Undersea Research Program (NURP)							
National Undersea Research Program (NURP)	12,321	4,192	0	(30)	4,162	4,990	9,152
National Institute for Undersea Science and Technolog	4,928	4,931	4,931	0	0	0	0
Subtotal, National Undersea Research Program (NU	17,249	9,123	4,931	(30)	4,162	4,990	9,152
Ocean Exploration							
NMNH East Wing (Oceans)	4,928	0	0	0	0	0	0
Ocean Exploration	22,670	13,659	0	(44)	13,615	1,513	15,128
Submersible Micro-technology Research	969	0	0	0	0	0	0
Exploration Autonomous Underwater Vehicle Subtotal, Ocean Exploration	28,567	494 <b>14,153</b>	494 <b>494</b>	(44)	13,615	1,513	15,128
Subtotal, Ocean Exploration	28,507	14,155	494	(44)	13,015	1,515	15,128
Other Ecosystems Programs							
Aquatic Invasive Species Program	0	986	0	(15)	971	1,506	2,477
Marine Aquaculture Program	0	4,558	2,959	7	1,606	0	1,606
Subtotal, Other Ecosystems Programs	0	5,544	2,959	(8)	2,577	1,506	4,083
Invasive Species and Partnership Programs							
Aquatic Ecosystems - Canaan Valley Institute	4,239	5,917	5,917	0	0	0	0
Institute for Science Technology and Public Policy	887	0	0	0	0	0	0
Atmospheric Dispersion Forecasting / Jackson State Ur	986	1,480	1,480	0	0	0	0
Great Lakes Toxicity Gulf of Maine Council	488 739	0 740	740	0	0	0	0
Lake Champlain Research Consortium	345	740 346	740 346	0	0	0	0
NISA/Ballast Water Demonstrations	3,450	2,959	2,959	0	0	0	0
NISA/Alaska	1,479	1,480	1,480	0	0	0	0
Invasive Milfoil	0	246	246	0	0	0	0
HI Micronesia Invasive Species Program	0	493	493	0	0	0	0
Cooperative Institute for New England Mari-culture an	2,957	1,972	1,972	0	0	0	0
NH Center fpr the Study of Lakes and Ecosystems	492	0	0	0	0	0	0
Cooperative Sensor Development Lab for Oceans & Cl	492	0	0	0	0	0	0
Aquaculture Education Program - Cedar Point MS	1,774	0	0	0	0	0	0
Pacific Tropical Ornamental Fish	492	493	493	0	0	0	0
Center for Aquaculture Development		986	986	0	0	0	0
West Alabama Shrimp Acquaculture Program		493	493	0	0	0	0
Urban Coastal Institute		493	493	0	0	0	0
Lake Champlain Emerging Threats Center for the Environment		493 789	493 789	0	0	0	0
Bio-screening Technology for Imported Seafood		986	986	0	0	0	0
Subtotal, Other Partnership Programs	18,820	20,366	20,366	0	0	0	0
Same and American programs	10,020	20,000	20,000	U	- 0		U

#### NOAA RESEARCH (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted	FY 2006 Terminations Amount	FY 2007 Total ATBs	FY 2007 Base Amount	FY 2007 Program Changes	FY 2007 Pres. Bud Request Amount
Total, Ocean, Coastal, and Great Lakes Research	146,826	126,676	32,603	274	94,347	8,629	102,976
Information Technology, R&D, and Science Educatio High Performance Computing Initiatives Educational Partnership Program/Minority Serving Ins Total, Info Tech, R&D, & Science Education	12,322	6,411 0 <b>6,411</b>	0 0 <b>0</b>	31 0 <b>31</b>	6,442 0 <b>6,442</b>	6,474 0 <b>6,474</b>	12,916 0 <b>12,916</b>
Total, NOAA Research - ORF	404,106	370,241	75,417	6,203	301,027	37,246	338,273
Other NOAA Research Accounts Total, NOAA Research - PAC Total, NOAA Research - Other GRAND TOTAL NOAA RESEARCH	9,663 0 <b>413,769</b>	9,369 0 <b>379,610</b>	0 0 75,417	26 0 <b>6,229</b>	9,395 0 310,422	984 0 <b>38,230</b>	10,379 0 <b>348,652</b>

### NATIONAL WEATHER SERVICE (\$ in Thousands)

	FY2005	FY 2006	FY 2006	FY 2007	FY 2007	FY 2007	FY 2007
FY 07 PROPOSED OPERATING PLAN	Enacted	Enacted	Terminations	Total	Base	Program	Pres. Bud
Operations, Research and Facilities	"Currently			ATBs		Changes	Request
	Available BA'' Amount	Amount	Amount	Amount	Amount	Amount	Amount
Operations and Research	Amount	Amount	Amount	Amount	Amount	Amount	Amount
Local Warnings and Forecasts Base	9,938	12,849	0	(11,781)	1,068	0	1,068
Local Warnings and Forecasts Base	9,212	9,089	0	3,645	12,734	0	12,734
Local Warnings and Forecasts Base	503,798	504,532	8,870	51,558	547,220	1,400	548,620
Tsunami Hazard Mitigation (moved from OAR)	4,239	2,260	0	(2,260)	0	0	0
Tsunami Warning & Environmental Obs for AK (TWE	1,971	1,972	1,972	0	0	0	0
Air Quality Forecasting Pilot Program	2,925	0	0	0	0	0	0
Air Quality Forecasting	1,725	2,959	0	(14)	2,945	2,500	5,445
Alaska Data Buoys	1,478	0	0	1,683	1,683	0	1,683
HI Data Bouys	247	0	0	0	0	0	0
Sustain Cooperative Observer Network	1,774	986	0	(5)	981	890	1,871
Hurricane Mitigation Alliance (SUSF)	3,203	2,071	2,071	0	0	0	0
Red River Basin Institute / Decision Info Network	267	0	0	0	0	0	0
Susquehanna River Basin Flood System	0	1,972	1,972	0	0	0	0
New England Weather Technology Initiative	542	0	0	0	0	0	0
NOAA Profiler Network	3,155	2,860	0	(24)	2,836	3,500	6,336
NC Flood Plain Mapping Pilot	584	0	0	0	0	0	0,550
Aviation Forecast	0	0	0	0	0	0	0
Pacific Island Compact	3,450	3,452	0	13	3,465	50	3,515
Space Environment Center	197	0	0	0	0,403	0	0,515
Space Environment Center	6,653	3,945	0	203	4,148	3,199	7,347
USWRP - US Weather Research Program - THORPEX	4,436	4,931	0	68	4,999	2,457	7,456
Vermont Northeast Weather & Wind Data Integration	247	217	217	0	0	0	7,430
Payment to OMAO	468	0	0	0	0	0	0
Strengthen U.S. Tsunami Warning Network	400	6,016	128	2,167	8,055	12,360	20,415
Coastal & Inland Hurricane Monitoring & Prediction Pre	ogram	1,480	1,480	2,107	0,033	12,300	20,413
Coastal Weather Monitoring for Catastrophic Events	ogram	468	468	0	0	0	0
-				0	0	0	0
Western Kentucky Environmental Monitoring Network		1,479	1,479	-	_	-	0
National Data Buoy Center		22,920	1,740	(21,180)	0	0	0
Shenandoah Air Quality Forecasting		1,726	1,726	0	0	0	0
TAU & PIRATA Arrays		2,959	0	(2,959)	0	0	0
Sea Level Monitoring & Tide Guage Network	5 CO 500	237	237	0	0	0	0
Subtotal, Local Warnings and Forecasts	560,509	591,380	22,360	21,114	590,134	26,356	616,490
Advanced Hydrological Prediction Services	5,717	4,931	0	8	4,939	1,098	6,037
		•					
Aviation Weather	2,366	3,452	0	1	3,453	1,200	4,653
WFO Maintenance	0	8,277	990	29	7,316	0	7,316
Weather Radio Transmitters							
Weather Radio Transmitters Base	2,287	2,289	0	8	2,297	0	2,297
NOAA Weather Radio Transmitters - HI	197	0	0	0	0	0	0
NOAA Weather Radio Transmitters - MS	0	197	197	0	0	0	0
NOAA Weather Radio Transmitters - AI	0	50	50	0	0	0	0
Subtotal, Weather Radio Transmitters	2,484	2,536	247	8	2,297	0	2,297
Subtotal, Local Warnings and Forecasts	571,076	610,576	23,597	21,160	608,139	28,654	636,793
# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					,	- ,	,
Central Forecast Guidance							
Central Forecast Guidance	5,725	5,864	0	314	6,178	0	6,178
Central Forecast Guidance	2,807	2,876	0	(2,376)	500	0	500
Central Forecast Guidance	37,581	36,743	2,000	9,642	44,385	0	44,385
National Hurricane Center	,	5,721	0	(5,721)	0	0	,
Subtotal, Central Forecast Guidance	46,113	51,204	2,000	1,859	51,063	0	51,063
	C1 100	CC1 #00	27.707	22.010	(F0 202	20.654	(OF OF C
Total, Operations and Research	617,189	661,780	25,597	23,019	659,202	28,654	687,856
Systems Operation & Maintananas (O.S.M.)							
Systems Operation & Maintenance (O&M)	20.725	20.046	_	002	40.000	2.020	40.750
NEXRAD	38,735	39,946	0	983	40,929	2,830	43,759
Subtotal, NEXRAD	38,735	39,946	0	983	40,929	2,830	43,759
4000	0.055	0.400		212	0.51		0.511
ASOS	8,265	8,498	0	218	8,716	0	8,716
Subtotal, ASOS	8,265	8,498	0	218	8,716	0	8,716
AWIDE	26.505	22 515	<u></u>		24.140	2.455	25.502
AWIPS	36,695	33,611	0	531	34,142	3,461	37,603
NWSTG Backup - CIP	3,042	3,009	0	3	3,012	2,500	5,512
Total, Systems Operation & Maintenance	86,737	85,064	0	1,735	86,799	8,791	95,590
rotan, operation & Maintenance	00,737	05,004	U	1,735	00,799	0,791	93,390

### NATIONAL WEATHER SERVICE (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted Amount	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base Amount	FY 2007 Program Changes	FY 2007 Pres. Bud Request Amount
Total, National Weather Service - ORF	703,926	746,844	25,597	24,754	746,001	37,445	783,446
Other National Weather Service Accounts							
Total, National Weather Service - PAC	79,055	101,400	13,273	4,228	92,355	6,065	98,420
Total, National Weather Service - Other	0	0	0	0	0	0	0
GRAND TOTAL NATIONAL WEATHER SERVICE	782,981	848,244	38,870	28,982	838,356	43,510	881,866

#### NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE $(\$\ in\ Thousands)$

FY 07 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY2005 Enacted "Currently Available BA"	FY 2006 Enacted	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base	FY 2007 Program Changes	FY 2007 Pres. Bud Request
Environmental Satellite Observing Systems	Amount	Amount	Amount	Amount	Amount	Amount	Amount
0 <i>i</i>	26.026	26 500	0	557	37,057	(800)	26 257
Satellite Command and Control	36,026	36,500	0	54		(800) 0	36,257
NSOF Operations Satellite Command and Control	5,599 <b>41,625</b>	7,477 <b>43,977</b>	0	611	7,531 <b>44,588</b>	(800)	7,531 <b>43,788</b>
Sattlife Command and Control	41,025	43,777	<u> </u>	011	44,500	(800)	43,766
Product Processing and Distribution							
Product Processing and Distribution	4,472	3,628	0	59	3,687	0	3,687
Product Processing and Distribution	22,401	23,620	0	363	23,983	(400)	23,583
Subtotal, Product Processing and Distribution	26,873	27,248	0	422	27,670	(400)	27,270
,	,	Í				Ì	Ź
Product Development, Readiness & Application							
Product Development, Readiness & Application	16,601	16,987	0	328	17,315	(400)	16,915
Product Development, Readiness & Application (Ocea	3,942	3,925	0	(64)	3,861	0	3,861
Coral Reef Monitoring	690	0	0	0	0	737	737
Joint Center/Accelerate Use of Satellites	2,168	3,247	0	11	3,258	0	3,258
Research to Ops/NOAA-NASA Partnerships	3,942	3,945	3,945	0	0		0
Global Wind Demo	3,696	3,649	2,667	0	982	(982)	0
Subtotal, Product Development, Readiness & Applica	31,039	31,753	6,612	275	25,416	(645)	24,771
			-		-		·
Interagency Global Positioning System Executive Board	247	0	0				0
Commercial Remote Sensing Licensing & Enforcement	1,085	1,228	0	12	1,240	0	1,240
Remote Sensing Center		1,972	1,972	0	0		0
Office of Space Commercialization	591	591	0	10	601	0	601
Total, Environmental Satellite Observing Systems	101,460	106,769	8,584	1,330	99,515	(1,845)	97,670
NOAA's Data Centers & Information Services							
Archive, Access & Assessment			_				
Archive, Access & Assessment	14,528	10,288	0	284	10,572	6,700	17,272
Archive, Access & Assessment	2,244	3,524	0	59	3,583	384	3,967
Archive, Access & Assessment	7,656	7,429	0	215	7,644	912	8,556
Archive, Access & Assessment	2,921	2,235	0	45	2,280	274	2,554
Archive, Access & Assessment	3,205	1,394	0	59	1,453	152	1,605
KY	7,811	7,692	5,647	(22)	2,023	(662)	1,361
MD	5,421	5,426	3,930	3	1,499	(506)	993
NC - Quality Assurance/Quality Control	1,479	0	0	0	0	275	275
WV	7,811	7,692	5,537	(22)	2,133	(699)	1,434
GOES Data Archive Project	2,437	2,466	2,466	0	0		0
Payment to OMAO	328	0	0	0	0		0
Subtotal, Archive, Access & Assessment	55,841	48,146	17,580	621	31,187	6,830	38,017
Constal Data Development	4.510	5 200	9.60	2.1	4.545	0	4.545
Coastal Data Development	4,510	5,380	868	34	4,546	0	4,546 0
Regional Climate Centers	2,464	2,959	2,959	0	0		-
International Pacific Research Ctr (U of H)	1,971	1,972	1,972	0	0		0
Pacific Ocean and Environment Info Center	986	0 256	0	0	0 246	^	0 246
Environmental Data Systems Modernization	8,828	9,256	0	90	9,346	0	9,346
National Climatic Data Center	antar	296	296	0	0		0
Integrated Environmental Applications & Information C	ешег	2,959	2,959	0	0		0
Total, NOAA's Data Centers & Information Services	74,600	70,968	26,634	745	45,079	6,830	51,909
The North Party and Alexander West Pro-	487.070	1== =0-	25.210	2.05-	****	4.00=	140 550
Total, Nat'l Environmental Satellite, Data and Informa	176,060	177,737	35,218	2,075	144,594	4,985	149,579
Other Nat'l Environmental Satellite, Data and Informa	tion Service Acco	unts					
Total, National Environmental Satellite, Data and Informa		774,483	4,332	1,697	771,848	112,456	884,304
Total, National Environmental Satellite, Data and Informa	0	0	0	0	0	0	0
GRAND TOTAL NATIONAL ENVIRONMENTAL SA	907,448	952,220	39,550	3,772	916,442	117,441	1,033,883

### PROGRAM SUPPORT (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted Amount	FY 2006 Terminations Amount	FY 2007 Total ATBs Amount	FY 2007 Base Amount	FY 2007 Program Changes Amount	FY 2007 Pres. Bud Request Amount
Corporate Services							
Under Secretary and Associate Offices	24,641	26,128	0	422	26,550	2,737	29,287
Under Secretary and Associate Offices Base Subtotal, Under Secretary and Assoc. Ofc	24,641 24,641	26,128 26,128	0	422 422	26,550 26,550	2,737 2,737	29,287 <b>29,287</b>
Subtotal, Older Secretary and Assoc. Of	24,041	20,120	Ū	422	20,550	2,737	27,201
NOAA Wide Coporate Services & Agency Managemo	ent						
NOAA Wide Coporate Services & Agency Managemen	95,637	105,080	0	301	105,381	8,959	114,340
CBS (Formally CAMS)	9,856	9,862	0	38	9,900		9,900
Planning, Programming, and Integration	2,464	1,972	0	(48)	1,924		1,924
Payment to the DOC Working Capital Fund	38,934	33,532	0	893	34,425	0.050	34,425
Subtotal, NOAA Wide Corporate Srvcs & Agency M	146,891	150,446	0	1,184	151,630	8,959	160,589
Office of Chief Information Officer							
IT Security	0	0	0	0	0	2,050	2,050
Subtotal, Office of Chief Information Officer	0	0	0	0	0	2,050	2,050
Total, Corporate Services	171,532	176,574	0	1,606	178,180	13,746	191,926
VOLUE III III D							
NOAA Education Program	- 150	c 202	- 202	_			•
NOAA Education Program / Education Initiative	6,473	6,283	6,283	0	0	2.700	2.700
Hollings Scholarship Nancy Foster Scholarship	3,919	3,962 0	3,962	0	0	3,700 400	3,700 400
JASON Education and Outreach	2,463	2,466	1,466	0	1,000	400	1,000
BWET Hawaii	1,479	1,480	1,480	0	0		0
BWET California	-,	1,972	1,972	0	0		0
BWET Chesapeake Bay		3,452	3,452	0	0		0
Educational Partnership Program/Minority Serving Inst	titutions (EPPMSI	14,201	0	11	14,212	0	14,212
Hawaii Humpback Education Program		1,726	1,726	0	0		0
Gulf Coast Exploreum		986	986	0	0		0
Chesapeake Bay Interpretive Buoys		493	493	0	0		0
Narragansett Bay Marine Education (Save the Bay)	492 <b>18,275</b>	493 <b>37,514</b>	493 <b>22,313</b>	0 <b>11</b>	0 15,212	4,100	0 19,312
Total, NOAA Education Program	18,275	57,514	22,313	11	15,212	4,100	19,312
Facilities							
NOAA Facilities Management & Construction and Safe	7,392	3,981	0	1,068	5,049	9,395	14,444
Boulder Facilities Operations	3,464	3,465	0	14	3,479	0	3,479
Boulder Facilities Operations	630	630	0	3	633	0	633
Boulder Facilities Operations	406			1	407		000
	400	406	0	1	407	0	407
Subtotal, NOAA Fac Mgmt, Const& Maint	30,324	406 <b>8,482</b>	0 <b>0</b>	1,086	9,568	9,395	
Subtotal, NOAA Fac Mgmt, Const& Maint	30,324	8,482	0	1,086	9,568	9,395	407 18,963
				-			407
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety	30,324	8,482	0	1,086	9,568	9,395	407 18,963
Subtotal, NOAA Fac Mgmt, Const& Maint	30,324 2,957	2,367	0	1,086	9,568 2,359	9,395	407 18,963 4,046
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety	30,324 2,957	2,367	0	1,086	9,568 2,359	9,395	407 18,963 4,046
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities	30,324 2,957	2,367 0	0	1,086	9,568 2,359 0	9,395 1,687	407 18,963 4,046
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance	30,324 2,957	2,367 0	0	1,086	9,568 2,359 0	9,395 1,687	407 18,963 4,046
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services	30,324 2,957 0 33,281	8,482 2,367 0 10,849	0	1,086 (8) 0 1,078	9,568 2,359 0 11,927	9,395 1,687 0 11,082	407 18,963 4,046 0 23,009
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition	30,324 2,957 0 33,281	8,482 2,367 0 10,849	0 0 0 0	1,086 (8) 0 1,078	9,568 2,359 0 11,927	9,395 1,687 0 11,082	407 18,963 4,046 0 23,009
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance  Marine Services  Data Acquisition UNOLS	30,324 2,957 0 33,281	8,482 2,367 0 10,849 94,007 0	0 0 0 0 8,186	1,086 (8) 0 1,078 2,346 10	9,568 2,359 0 11,927 88,167 10	9,395 1,687 0 11,082	407 18,963 4,046 0 23,009 88,967
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance  Marine Services  Data Acquisition  UNOLS  Operational Differential for NOAA Ships	30,324 2,957 0 33,281 73,924 1,478	94,007 0	8,186 0	1,086 (8) 0 1,078 2,346 10 0	9,568 2,359 0 11,927 88,167 10 0	9,395 1,687 0 11,082	407 18,963 4,046 0 23,009 88,967
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance  Marine Services  Data Acquisition  UNOLS  Operational Differential for NOAA Ships  OE and NOAA Corps Pay Differential	30,324 2,957 0 33,281 73,924 1,478	94,007 0 10,849	8,186 0 0	1,086  (8)  0  1,078  2,346  10  0  0	9,568 2,359 0 11,927 88,167 10 0 0	9,395 1,687 0 11,082 800 0 4,500	407 18,963 4,046 0 23,009 88,967 10 4,500 0
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance  Marine Services  Data Acquisition  UNOLS  Operational Differential for NOAA Ships	30,324 2,957 0 33,281 73,924 1,478	94,007 0	8,186 0	1,086 (8) 0 1,078 2,346 10 0	9,568 2,359 0 11,927 88,167 10 0	9,395 1,687 0 11,082	407 18,963 4,046 0 23,009 88,967
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance  Marine Services  Data Acquisition  UNOLS  Operational Differential for NOAA Ships  OE and NOAA Corps Pay Differential	30,324 2,957 0 33,281 73,924 1,478	94,007 0 10,849	8,186 0 0	1,086  (8)  0  1,078  2,346  10  0  0	9,568 2,359 0 11,927 88,167 10 0 0	9,395 1,687 0 11,082 800 0 4,500	407 18,963 4,046 0 23,009 88,967 10 4,500 0
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential  Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance	30,324 2,957 0 33,281 73,924 1,478 1,971 110,502	94,007 0 10,849 94,007 0 0 1,479 95,486	8,186 0 0	1,086  (8)  0  1,078  2,346  10  0  2,356	9,568 2,359 0 11,927 88,167 10 0 88,177	9,395 1,687 0 11,082 800 0 4,500 5,300	407 18,963 4,046 0 23,009 88,967 10 4,500 93,477
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential Subtotal, Marine Services  Fleet Planning and Maintenance	30,324 2,957 0 33,281 73,924 1,478 1,971 110,502	94,007 0 0 10,849 94,007 0 0 1,479 95,486	8,186 0 0 1,479 9,665	1,086  (8)  0  1,078  2,346  10  0  2,356	9,568 2,359 0 11,927 88,167 10 0 0 88,177	9,395 1,687 0 11,082 800 0 4,500 5,300	407 18,963 4,046 0 23,009 88,967 10 4,500 0 93,477
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential  Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance Subtotal, Fleet Planning and Maintenance	30,324 2,957 0 33,281 73,924 1,478 1,971 110,502 11,828 13,799	94,007 0 10,849 94,007 0 1,479 95,486 14,955	8,186 0 0 1,479 9,665	1,086  (8)  0  1,078  2,346  10  0  2,356  1,275  1,275	9,568 2,359 0 11,927 88,167 10 0 0 88,177 14,159	9,395 1,687 0 11,082 800 0 4,500 5,300 2,992 2,992	407 18,963 4,046 0 23,009 88,967 10 4,500 0 93,477 17,151
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential  Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance	30,324 2,957 0 33,281 73,924 1,478 1,971 110,502	94,007 0 10,849 94,007 0 0 1,479 95,486	8,186 0 0 1,479 9,665	1,086  (8)  0  1,078  2,346  10  0  2,356	9,568 2,359 0 11,927 88,167 10 0 88,177	9,395 1,687 0 11,082 800 0 4,500 5,300	407 18,963 4,046 0 23,009 88,967 10 4,500 0 93,477
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential  Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance Subtotal, Fleet Planning and Maintenance  Total, Marine Operations and Maintenance	30,324 2,957 0 33,281 73,924 1,478 1,971 110,502 11,828 13,799	94,007 0 10,849 94,007 0 1,479 95,486 14,955	8,186 0 0 1,479 9,665	1,086  (8)  0  1,078  2,346  10  0  2,356  1,275  1,275	9,568 2,359 0 11,927 88,167 10 0 0 88,177 14,159	9,395 1,687 0 11,082 800 0 4,500 5,300 2,992 2,992	407 18,963 4,046 0 23,009 88,967 10 4,500 0 93,477 17,151
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential  Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance Subtotal, Fleet Planning and Maintenance	30,324 2,957 0 33,281 73,924 1,478 1,971 110,502 11,828 13,799	94,007 0 10,849 94,007 0 1,479 95,486 14,955	8,186 0 0 1,479 9,665	1,086  (8)  0  1,078  2,346  10  0  2,356  1,275  1,275	9,568 2,359 0 11,927 88,167 10 0 0 88,177 14,159	9,395 1,687 0 11,082 800 0 4,500 5,300 2,992 2,992	407 18,963 4,046 0 23,009 88,967 10 4,500 0 93,477 17,151
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance Subtotal, Fleet Planning and Maintenance  Total, Marine Operations and Maintenance  Aviation Operations	30,324 2,957 0 33,281 73,924 1,478 1,971 110,502 11,828 13,799 124,301	94,007 0 10,849 94,007 0 0 1,479 95,486 14,955 14,955	8,186 0 0 1,479 9,665 2,071 2,071	1,086  (8)  0  1,078  2,346  10  0  2,356  1,275  1,275  3,631	9,568 2,359 0 11,927 88,167 10 0 0 88,177 14,159 14,159	9,395 1,687 0 11,082 800 0 4,500 5,300 2,992 2,992 8,292	407 18,963 4,046 0 23,009 88,967 10 4,500 0 93,477 17,151 17,151
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential  Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance Subtotal, Fleet Planning and Maintenance  Total, Marine Operations and Maintenance  Aviation Operations Aircraft Services	30,324  2,957  0  33,281  73,924 1,478  1,971  110,502  11,828 13,799  124,301	94,007 0 10,849 94,007 0 1,479 95,486 14,955 14,955	0 0 0 0 8,186 0 0 1,479 9,665 2,071 2,071 11,736	1,086  (8)  0  1,078  2,346 10 0 2,356  1,275 1,275 3,631	9,568 2,359 0 11,927 88,167 10 0 88,177 14,159 14,159 102,336	9,395 1,687 0 11,082 800 0 4,500 5,300 2,992 2,992 8,292	407 18,963 4,046 0 23,009 88,967 10 4,500 0 93,477 17,151 110,628
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential  Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance Subtotal, Fleet Planning and Maintenance  Total, Marine Operations and Maintenance  Aviation Operations Aircraft Services	30,324  2,957  0  33,281  73,924 1,478  1,971  110,502  11,828 13,799  124,301	94,007 0 10,849 94,007 0 1,479 95,486 14,955 14,955	0 0 0 0 8,186 0 0 1,479 9,665 2,071 2,071 11,736	1,086  (8)  0  1,078  2,346 10 0 2,356  1,275 1,275 3,631	9,568 2,359 0 11,927 88,167 10 0 88,177 14,159 14,159 102,336	9,395 1,687 0 11,082 800 0 4,500 5,300 2,992 2,992 8,292	407 18,963 4,046 0 23,009 88,967 10 4,500 0 93,477 17,151 110,628
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential  Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance Subtotal, Fleet Planning and Maintenance  Total, Marine Operations and Maintenance  Aviation Operations Aircraft Services  Total, Aviation Operations  Future Healthcare Benefits for Current Officers	30,324 2,957 0 33,281 73,924 1,478 1,971 110,502 11,828 13,799 124,301 18,334 18,334	94,007 0 10,849 94,007 0 1,479 95,486 14,955 14,955 110,441 20,916 20,916	8,186 0 0 1,479 9,665 2,071 2,071 11,736 2,550 2,550	1,086  (8)  0  1,078  2,346 10 0 2,356  1,275 1,275 3,631  181 181 28	9,568 2,359 0 11,927 88,167 10 0 88,177 14,159 14,159 102,336 18,547 18,547 2,012	9,395 1,687 0 11,082 800 0 4,500 5,300 2,992 2,992 8,292 680 680 (2,012)	407 18,963 4,046 0 23,009 88,967 10 4,500 0 93,477 17,151 110,628 19,227 19,227
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential  Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance Subtotal, Fleet Planning and Maintenance  Total, Marine Operations and Maintenance  Aviation Operations Aircraft Services  Total, Aviation Operations	30,324 2,957 0 33,281 73,924 1,478 1,971 110,502 11,828 13,799 124,301 18,334 18,334	94,007 0 10,849 94,007 0 1,479 95,486 14,955 14,955 110,441 20,916 20,916	8,186 0 0 1,479 9,665 2,071 2,071 11,736	1,086  (8)  0  1,078  2,346 10 0 2,356  1,275 1,275  3,631  181	9,568 2,359 0 11,927 88,167 10 0 88,177 14,159 14,159 102,336	9,395  1,687  0  11,082  800 0 4,500  5,300  2,992 2,992 2,992 680 680	407 18,963 4,046 0 23,009 88,967 10 4,500 0 93,477 17,151 110,628 19,227 19,227
Subtotal, NOAA Fac Mgmt, Const& Maint  Environmental Compliance & Safety  Subtotal, Project Planning and Execution  Total, Facilities  Marine Operations & Maintenance Marine Services  Data Acquisition UNOLS Operational Differential for NOAA Ships OE and NOAA Corps Pay Differential  Subtotal, Marine Services  Fleet Planning and Maintenance Fleet Planning and Maintenance Subtotal, Fleet Planning and Maintenance  Total, Marine Operations and Maintenance  Aviation Operations Aircraft Services  Total, Aviation Operations  Future Healthcare Benefits for Current Officers	30,324 2,957 0 33,281 73,924 1,478 1,971 110,502 11,828 13,799 124,301 18,334 18,334	94,007 0 10,849 94,007 0 1,479 95,486 14,955 14,955 110,441 20,916 20,916	8,186 0 0 1,479 9,665 2,071 2,071 11,736 2,550 2,550	1,086  (8)  0  1,078  2,346 10 0 2,356  1,275 1,275 3,631  181 181 28	9,568 2,359 0 11,927 88,167 10 0 88,177 14,159 14,159 102,336 18,547 18,547 2,012	9,395 1,687 0 11,082 800 0 4,500 5,300 2,992 2,992 8,292 680 680 (2,012)	407 18,963 4,046 0 23,009  88,967 10 4,500 0 93,477  17,151 110,628

#### PROGRAM SUPPORT

(\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base	FY 2007 Program Changes	FY 2007 Pres. Bud Request
	- Taniount	· · · · · · · · · · · · · · · · · · ·	imount	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	Amount	· · · · · · · · · · · · · · · · · · ·
Other Program Support Accounts							
Total, Program Support - PAC	63,918	112,537	72,390	(4,605)	35,542	(14,851)	20,691
Total, Program Support - Other	17,574	20,149	0	1,185	21,334	0	21,334
GRAND TOTAL PROGRAM SUPPORT	449,129	490,964	108,989	3,115	385,090	21,037	406,127

#### ORF SUMMARY LINE AND STAFF OFFICE DIRECT OBLIGATIONS

FY 07 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted Amount	FY 2006 Terminations Amount	FY 2007 Total ATBs	FY 2007 Base Amount	FY 2007 Program Changes Amount	FY 2007 Pres. Bud Request Amount
National Ocean Service	542,034	493,151	135,385	416	358,182	36,273	394,455
National Marine Fisheries Service	676,515	667,226	103,859	4,557	567,924	81,064	648,988
NOAA Research	404,106	370,241	75,417	6,203	301,027	37,246	338,273
National Weather Service	703,926	746,844	25,597	24,754	746,001	37,445	783,446
National Environ. Sat. Data & Info Service	176,060	177,737	35,218	2,075	144,594	4,985	149,579
Planning, Program and Integration	0	0	0	0	0	0	0
Program Support	367,637	358,278	36,599	6,535	328,214	35,888	364,102
Subtotal Line & Staff Office Direct Obligations, ORF	2,870,278	2,813,477	412,075	44,540	2,445,942	232,901	2,678,843

### ORF ADJUSTMENTS (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted Amount	FY 2006 Terminations Amount	FY 2007 Total ATBs	FY 2007 Base Amount	FY 2007 Program Changes Amount	FY 2007 Pres. Bud Request Amount
SUBTOTAL LINE & STAFF OFFICE DIRECT OBLI	2,870,278	2,813,477	412.075	44,540	2,445,942	232,901	2,678,843
		_,==,==,==	111,011	,	_,:::,:::		2,010,010
FINANCING							
De-Obligations				(6,000)	(11,000)		(11,000)
Unobligated Balance Rescission Adj BA		(11,629)					
Subtotal ORF Financing	2,215	(11,629)	0	(6,000)	(11,000)	0	(11,000)
TOTAL DISCRETIONARY ORF BUDGET AUTHOR	2,872,493	2,801,848	412,075	38,540	2,434,942	232,901	2,667,843
TRANSFERS							
Unobligated Balance Rescission / Approp Adj							
Tranfer to ORF from PAC	(1,842)	(1,147)					
Tranfer to FFPA	246	1,972					
Promote & Develop - Tranfer to ORF	(65,000)	(67,000)		(10,000)	(77,000)		(77,000)
CZMF - Transfer to ORF	(2,960)	(3,000)			(3,000)		(3,000)
Transfer to ORF from Pacific Salmon	(89)	(67)					
Subtotal ORF Transfers	(82,779)	( <b>69,242</b> )	0	(10,000)	(80,000)	0	(80,000)
TOTAL DISCRETIONARY ORF APPROPRIATION	2,789,714	2,732,606	412,075	28,540	2,354,942	232,901	2,587,843

### $\label{eq:procurement} \mbox{PROCUREMENT, ACQUISITION AND CONSTRUCTION} \\ \mbox{(\$ in Thousands)}$

FY 07 PROPOSED OPERATING PLAN Procurement, Acquisition and Construction	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted	FY 2006 Terminations Amount	FY 2007 Total ATBs	FY 2007 Base Amount	FY 2007 Program Changes	FY 2007 Pres. Bud Request
NOS							
Construction/Acquisition							
Coastal and Estuarine Land Conservation Program	501	245	245	0	0	0	0
Armand Bayou and Genoa-Red Bluff, TX	591 493	345	345	0	0	0	0
Bainbridge Island, WA Bayou Liberty Watershed Wetlans Conservation	887	0	0	0	0	0	0
Buffalo Bayou, TX	1,183	0	0	0	0	0	0
Dos Pueblos, CA	2,957	0	0	0	0	0	0
East Sandusky Bay Preserve, Ohio	1,479	0	0	0	0	0	0
Flats East Riverfront Park, Ohio	1,479	0	0	0	0	0	0
Hawaii CELP Projects	2,957	0	0	0	0	0	0
Louisiana Dept of Wildlife and Fisheries	1,971	0	0	0	0	0	0
Manahawkin Marsh, NJ	789	0	0	0	0	0	0
Maumee River Basin, Ohio	1,479	1,479	1,479	0	0	0	0
Maury Island	1,479	0	0	0	0	0	0
MD Chesapeake Bay (incl Wapiti Farms & Holly Grove		0	0	0	0	0	0
Mentor Marsh Lake County, Ohio	986	0	0	0	0	0	0
Middletown, RI Mount Agamenticus to the Sea ME	739 986	0	0	0	0	0	0
Mount Agamenticus to the Sea, ME National Program	986	0	0	0	0	0	0
National Program North Hempstead, NY	986	0	0	0	0	0	0
Nulands Neck, MA	296	0	0	0	0	0	0
Orange Beach (Robinson Island), AL	986	789	789	0	0	0	0
Other MD Chesapeake Bay CELP Projects	0	0	0	0	0	0	0
Port Aransas Nature Preserve Wetlands Protection Proje	2,957	0	0	0	0	0	0
Potomac Watershed, VA	2,957	0	0	0	0	0	0
Seacoast, NH	2,464	0	0	0	0	0	0
Southhold, NY	1,479	0	0	0	0	0	0
Southwest Alaska Conservation	986	0	0	0	0	0	0
Tolay Lake, Sonoma, CA (FY 06)/(fomerly Tonner Can	492	0	0	0	0	0	0
Wolf River Corridor	1,971	0	0	0	0	0	0
Coastal Ecosystems (Mobile & Baldwin)	·	4,931	4,931	0	0	0	0
Moose Mountain		986	986	0	0	0	0
Newfields		1,972	1,972	0	0	0	0
Winnicut Headwaters		1,479	1,479	0	0	0	0
Twelve Oaks		887	887	0	0	0	0
Grand River Big Pond		306	306	0	0	0	0
Eastern Shore		542	542	0	0	0	0
Jamestown		1,972	1,972	0	0	0	0
Sowams Property		986	986	0	0	0	0
Maquoit Bay		542	542	0	0	0	0
South Carolina Coastal Inititative		1,479	1,479	0	0	0	0
Babcock Ranch		2,959	2,959	0	0	0	0
Chesapeake Bay		3,945	3,945	0	0	-	0
Blackbird Creek Reserve Tuniper's Pond		1,479 494	1,479 494	0	0	0	0
Detroit Riverfront West		2,959	2,959	0	0	0	0
Potter Creek/Otis Bogs		494	494	0	0	0	0
Piedras Blancas		494	494	0	0	0	0
Herring River		494	494	0	0	0	0
Elmer's Island		247	247	0	0	0	0
Tchefuncte Marsh		197	197	0	0	0	0
Webster Woods		740	740	0	0	0	0
Commencement Bay		1,529	1,529	0	0	0	0
Pond Brook		1,332	1,332	0	0	0	0
Ferolbink Farm		494	494	0	0	0	0
Common Pasture		247	247	0	0	0	0
Hidalgo Park		346	346	0	0	0	0
Brays Bayou		395	395	0	0	0	0
Oswegatchie Hills		875	875	0	0	0	0
Subtotal, Coastal and Estuarine Land Conservation l	41,697	38,415	38,415	0	0	0	0
NEDDO A 114 /G							
NERRS Acquisition/Construction:	c 000	4.021	^	(50)	4.072	2.205	7.170
National Estuarine Rsrch Reserve Construction & Land	6,899	4,931	0	(58)	4,873	2,305	7,178
Elkhorn Slough, CA	1,971	4 275	0	0	0	0	0
Texas NERR Subtotal, NERRS Acquisition/Construction	8,870	4,375 <b>9,306</b>	4,375 <b>4,375</b>	(58)	4,873	2,305	7,178
	3,073	2,500	4,070	(38)	4,073	2,505	7,170
Section 2 (FWCA) Coastal/Estuarine Land Acquisition							
Bonneau Ferry, SC	18,922	0	0	0	0	0	0
Great Bay Partnership, NH	7,885	5,917	5,917	0	0	0	0
Village Point Park Preserve	.,	986	986	0	0	0	0
Subtotal, NERRS Acquisition/Construction	26,807	6,903	6,903	0	0	0	0
G Land A NUMBER A TOTAL OF THE STATE OF THE							
Subtotal, NERRS Acquisition/Construction	35,677	16,209	11,278	(58)	4,873	2,305	7,178

## PROCUREMENT, ACQUISITION AND CONSTRUCTION (\$ in Thousands)

	FY2005	FY 2006	FY 2006	FY 2007	FY 2007	FY 2007	FY 2007
FY 07 PROPOSED OPERATING PLAN	Enacted	Enacted	Terminations	Total	Base	Program	Pres. Bud
Procurement, Acquisition and Construction	"Currently	Zimeteu	Terminations	ATBs	Daye	Changes	Request
	Available BA''			-			•
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
Marine Sanctuaries Construction/Acquisition							
Marine Sanctuaries Construction Base	4,928	0	0	0	0	5,495	5,495
Channel Islands National Marine Sanctuary	3,942	2,959	2,959	0	0	0	0
Flower Gardens Banks Patrol Craft Small Boats	0	3,156 4,931	3,156 4,931	0	0	0	0
Thunder Bay NMS Exhibit	986	4,931 986	4,931 986	0	0	0	0
Monterey Bay National Marine Sanctuary	0	1,479	1,479	0	0	0	0
Gulf of Farralones	_	2,466	2,466	0	0	0	0
Subtotal, Marine Sanctuary Construction/Acquisition	9,856	15,977	15,977	0	0	5,495	5,495
Other NOS Construction/Acquisition							
Bigelow Lab for Ocean Science (ME)	1,478	0	0	0	0	0	0
NOAA ICOOS Observing Systems	8,871	0	0	0	0	0	0
Convert NOAA Weather Bouys with NDBC	7,886	0	0	0	0	0	0
Gulf Coast Lab at Cedar Point (USM)	1,478	0	0	0	0	0	0
Down East Inst. For Marine Research (ME)	0	986	986	0	0	0	0
Pier Romeo Hardening (Charleston)	2,366	0	0	0	0	0	0
Marine Environmental Health Research Laboratory En	6,899	0	0	0	0	0	0
National Aquarium Partnership	986	0 4,931	0 4,931	0	0	0	0
Conservation Institute Univ of South Carolina Thomas Cooper Facility	1,183 3,942	4,931	4,931	0	0	0	0
Coastal Service Center	3,942	0	0	0	0	0	0
Center for Aquatic Resource Management	3,742	5,917	5,917	0	0	0	0
Pascagoula River Basin Estuarine Center		1,479	1,479	0	0	0	0
Oxfor Cooperative Lab		1,480	1,480	0	0	0	0
Gulf Coast Marine Aquaculture Laboratory		5,917	5,917	0	0	0	0
Subtotal, Other NOS Construction/Acquisition	39,031	20,710	20,710	0	0	0	0
Total NOS - PAC	126,261	91,311	86,380	(58)	4,873	7,800	12,673
	- , .	,	,	( /	, , ,	,	,, ,
NMFS							
Systems Acquisition/Construction		_	_	_	_	_	
Systems Acq. Computer Hardware & Software	3,450	0	0	0	0	0	0
Aquatic Resources	4,928	4,437 0	4,437	0	0	0	0
NOAA Pacfic Regional Center/ HI (Honolulu Fisheries Pascagoula Laboratory	14,785 0	15,159	15,159	0	0	0	0
Barrow Arctic Research Center	5,914	5,917	5,917	0	0	0	0
Phase III - Galveston Laboratory Renovation - NMFS	1,971	0	0,517	0	0	0	0
Center for Ecosystem-Based Fisheries Management	, .	4,931	4,931	0	0	0	0
Subtotal, NMFS Construction	31,048	30,444	30,444	0	0	0	0
Total, NMFS - PAC	31,048	30,444	30,444	0	0	0	0
OAR							
Systems Acquisition	9,363	0.260	0	26	9,395	984	10.270
Research Supercomputing/ CCRI Air Force Hurricane Radiometer Processing	300	9,369 0	0	26 0	9,393	984	10,379
Subtotal, OAR Systems Acquisition	9,663	9,369	0	26	9,395	984	10,379
Subtotal, OTH Systems requisition	2,002	2,505	U	20	7,570	204	10,575
Total, OAR - PAC	9,663	9,369	0	26	9,395	984	10,379
NWS							
Systems Acquisition							
ASOS	4,608	8,506	3,900	29	4,635	(700)	3,935
AWIPS	12,708	13,280	571	55	12,764	0	12,764
NEXRAD	10,665	9,343	1,000	33	8,376	0	8,376
NWSTG Legacy Replacement	2,476	493	0	2	495	0	495
Radiosonde Network Replacement	6,285	6,299	1,972	20	4,347	(333)	4,014
Weather and Climate Supercomputing	6,681	6,372	0	24 48	6,396	0	6,396
Weather and Climate Supercomputing Weather and Climate Supercomputing Back-up	12,641 7,045	12,648 7,050	0	48 27	12,696 7,077	0	12,696 7,077
Cooperative Observer Network Modernization (NERO	7,043 864	4,218	0	(479)	3,739	0	3,739
Cooperative Observer Network Modernization (NERO	0	0	0	495	495	0	495
NWS Coastal Global Ocean Observing System	0	0	0	1,492	1,492	(1,492)	0
Complete and Sustain NOAA Weather Radio	0	5,572	0	22	5,594	0	5,594
All Hazard National Warning Network: NOAA Weath	0	1,998	2,000	2	0	0	0
Strengthen U.S. Tsunami Warning Network		3,796	3,800	3,474	3,470	(2,440)	1,030
Subtotal, NWS Systems Acquisition	63,973	79,575	13,243	5,244	71,576	(4,965)	66,611
Construction							
WFO Construction	12,814	13,412	0	(938)	12,474	30	12,504
NOAA Center for Weather & Climate Prediction	2,268	8,413	30	(78)	8,305	11,000	19,305
Subtotal, NWS Construction	15,082	21,825	30	(1,016)	20,779	11,030	31,809
Total, NWS - PAC	79,055	101,400	13,273	4,228	92,355	6,065	98,420
l l							

### PROCUREMENT, ACQUISITION AND CONSTRUCTION (\$ in Thousands)

						=>/=	
FY 07 PROPOSED OPERATING PLAN	FY2005 Enacted	FY 2006 Enacted	FY 2006 Terminations	FY 2007 Total	FY 2007 Base	FY 2007 Program	FY 2007 Pres. Bud
Procurement, Acquisition and Construction	"Currently	Enacteu	Terminations	ATBs	Base	Changes	Request
,	Available BA"					g	
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
NESDIS							
Systems Acquisition							
Geostationary Systems	301,153	335,322	0	246	335,568	104,039	439,607
Subtotal, NESDIS - GOES	301,153	335,322	0	246	335,568	104,039	439,607
Polar Orbiting Systems - POES	104,230	101,261	0	506	101,767	(11,861)	89,906
Polar Orbiting Systems - NPOESS	300,528	316,580	0	1,012	317,592	20,278	337,870
	=0	4 400					40.5
EOS & Advanced Polar Data Processing, Distribution EOS & Advanced Polar Data Processing, Distribution	1,479 1,479	1,480 1,480	980 980	(5) (5)	495 495	0	495 495
Subtotal, NESDIS - EOS	2,958	2,960	1,960	(10)	990	0	990
			, , , ,			-	
CIP - single point of failure	2,760	2,798	37	11	2,772	0	2,772
Subtotal, NESDIS - CIP	2,760	2,798	37	11	2,772	0	2,772
Comprehensive Large Array Data Stewardship Sys (CI	6,448	8,876	2,335	(65)	6,476	0	6,476
NPOESS Preparatory Data Exploitation	0,448	4,437	2,333	18	4,455	0	4,455
· · · · · · · · · · · · · · · · · · ·		,	-		,		,
Subtotal, NESDIS Systems Acquisition	718,077	772,234	4,332	1,718	769,620	112,456	882,076
Construction							
Satellite CDA Facility	2,218	2,249	0	(21)	2,228	0	2,228
Suitland Facility / NSOF	11,093	0	0	0	2,228	0	0
Subtotal, NESDIS Construction	13,311	2,249	0	(21)	2,228	0	2,228
T. A.I. NEGDIG. DAG	721 200	77.4.402	4 222	1 (07	771 040	110.456	994 204
Total, NESDIS - PAC	731,388	774,483	4,332	1,697	771,848	112,456	884,304
Program Support / Corporate Services							
AMNH	986	0	0	0	0	0	0
Subtotal, Corporate Services	986	0	0	0	0	0	0
Program Support / Integrated Ocean Observing Systen							
NOAA ICOSS Observing Systems (NOS)		8,876	8,876	0	0	0	0
Convert NOAA Weather Bouys with NDBC (NOS)		3,945	3,945	0	0	0	0
Coastal Global Ocean Observing System (NWS)		1,477	0	(1,477)	0	0	0
Strengthen U. S. Tsunami Warning Network (NWS)		3,432	0	(3,432)	0	0	0
Subtotal, Integrated Ocean Observing System	0	17,730	12,821	(4,909)	0	0	0
Program Support / Construction							
Pacific Region Center		19,725	19,725	0	0	0	0
Subtotal, Construction	0	19,725	19,725	0	0	0	0
n							
Program Support / OMAO Fleet Replacement							
OMAO							
Small Waterplane Area Twin Hull Vessel (SWATH) &	9,167	3,945	3,945	0	0	0	0
Upgrades : NANCY FOSTER /OSCAR DYSON/HI'IA	1,774	3,210	24	0	3,186	(3,186)	0
Fisheries Survey Vessels	41,398	51,482	19,430	304	32,356	(18,565) 0	13,791
AUV Sensors FSV Calibration	0	2,959 0	2,959 0	0	0	3,500	3,500
Hydro Survey Launch Construction	0	0	0	0	0	2,400	2,400
Temporary Berthing for HENRY B. BIGELOW		0	0	0	0	1,000	1,000
Subtotal, OMAO Fleet Replacement	57,957	61,596	26,358	304	35,542	(14,851)	20,691
Aircraft Replacement							
G-IV Instrumentation Upgrades	3,496	0	0	0	0	0	0
Required Safety & Regulatory Upgrades to Various Air	1,479	0	0	0	0	0	0
Aircraft Equipment and Technology Refreshment	0	4,495	4,495	0	0	0	0
Third WP-3D Navigation	4.0==	8,991	8,991	0	0	0	0
Subtotal, OMAO Aircraft Replacement	4,975	13,486	13,486	0	0	0	0
Total, Program Support - PAC	63,918	112,537	72,390	(4,605)	35,542	(14,851)	20,691
Error in line office totals in PAC report language							
Subtotal Line & Staff Office Direct Obligations, PAC	1,041,333	1,119,544	206,819	1,288	914,013	112,454	1,026,467
				•	•	•	

FY 07 PROPOSED OPERATING PLAN Procurement, Acquisition and Construction	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base	FY 2007 Program Changes	FY 2007 Pres. Bud Request
SUBTOTAL LINE & STAFF OFFICE DIRECT OBLI	1,041,333	1,119,544	206,819	1,288	914,013	112,454	1,026,467
FINANCING	10,160						
De-Obligations			0		(2,000)	0	(2,000)
Unobligated Balance Rescission Adj BA		(13,371)			. , ,		
Subtotal PAC Financing	0	(13,371)	0	0	(2,000)	0	(2,000)
TOTAL DISCRETIONARY PAC BUDGET AUTHOR	1,041,333	1,106,173	206,819	1,288	912,013	112,454	1,024,467
TRANSFERS							
Unobligated Balance Rescission Adj Approp Transfer to ORF - Hollings Scholarship	1,043	1,147					
Tranfer from ORF to PAC	(366)	0					
Tranfer from PAC to ORF	1,842	0					
Transfer from PAC to NASA (construction)		26,629	0				
Subtotal PAC Transfers	2,519	27,776	0	0	0	0	0
TOTAL CJS PAC APPROPRIATION	1,043,852	1,133,949	206,819	1,288	912,013	112,454	1,024,467

#### NOAA GRAND TOTAL SUMMARY Total Other Discretionary Appropriations

#### ORF, PAC, AND OTHER DISCRETIONARY APPROPRIATIONS

FY 07 PROPOSED OPERATING PLAN	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base	FY 2007 Program Changes	FY 2007 Pres. Bud Request
Operations, Research and Facilities	2,789,714	2,732,606	412,075	28,540	2,354,942	232,901	2,587,843
Procurement and Acquisition	1,043,852	1,133,949	206,819	1,288	912,013	112,454	1,024,467
Coastal Zone Management Fund	3,000	3,000	0	0	3,000	0	3,000
Fisherman's Contingency Fund	492	0	0	0	0	0	0
Fisheries Financing Program	628	283	283	0	0	0	0
Pacific Coastal Salmon Fund	88,798	66,638	0	254	66,892	0	66,892
Medicare Eligible Retiree Health Care Fund				367	2,012	0	2,012
NOAA Grand Total Discretionary Appropriations	3,926,484	3,963,287	619,177	30,449	3,338,859	345,355	3,684,214

### OTHER ACCOUNTS (DISCRETIONARY) (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN	FY2005 Enacted "Currently Available BA"	FY 2006 Enacted	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base	FY 2007 Program Changes	FY 2007 Pres. Bud Request
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
NOS	_	_	_		_	_	
Coastal Zone Management Fund Obligations	0	0	0	0	0	0	0
Coastal Zone Management Fund Budget Authority	0	0	0	0	0	0	0
Coastal Zone Management Fund Appropriation	3,000	3,000	0	0	3,000	0	3,000
Total, NOS Oth Accts Discretionary Direct Obligations	0	0	0	0	0	0	0
Total, NOS Oth Accts Discretionary Budget Authority	0	0	0	0	0	0	0
Total, NOS Oth Accts Discretionary Appropriation	3,000	3,000	0	0	3,000	0	3,000
NMFS							
Fishermen's Contingency Fund Obligations	492	0	0	0	441	0	441
Fishermen's Contingency Fund Budget Authority	492	0	0	0	0	0	0
Fishermen's Contingency Fund Appropriations	492	0	0	0	0	0	0
S, - aFFF	.,2	Ü	Ü	Ů			
Fisheries Finance Program Account Obligations	1,367	2,255	2,255	0	0	0	0
Fisheries Finance Prog ram Account Budget Authority	1,367	2,255	2,255	0	0	0	0
Fisheries Finance Program Account Appropriation	628	283	283	0	0	0	0
Promote and Develop Fisheries Obligations		0	0	0	0	0	0
Promote and Develop Fisheries Budget Authority	(65,000)	(67,000)	0	(10,000)	(77,000)	0	(77,000)
Promote and Develop Fisheries Appropriation		0	0	0	0	0	0
Pacific Coastal Salmon Fund Obligations	88,216	66,571	0	254	66,825	0	66,825
Pacific Coastal Salmon Fund Budget Authority	88,216	66,571	0	254	66,825	0	66,825
Pacific Coastal Salmon Fund Appropriation	88,798	66,638	0	254	66,892	0	66,892
			-		00,07		
Marine Mammal Unusual Mortality Event Fund Obligation	0	0	0	(800)	(800)	0	(800)
Marine Mammal Unusual Mortality Event Fund Budget Au	800	0	0	0	0	0	0
Marine Mammal Unusual Mortality Event Fund Appropria	800	0	0	0	0	0	0
Total, NMFS Oth Accts Discretionary Direct Obligation	90,075	68,826	2,255	(546)	66,466	0	66,466
Total, NMFS Oth Accts Discretionary Budget Authorit	25,875	1,826	2,255	(9,746)	(10,175)	0	(10,175)
Total, NMFS Oth Accts Discretionary Appropriation	90,718	66,921	283	254	66,892	0	66,892
V P 70 11 P 2 W 11 P			=		A 0.4	_	
Medicare Eligible Retiree Healthcare Fund Acct Obligation		1,645	0	367	2,012	0	2,012
Medicare Eligible Retiree Healthcare Fund Acct Budget A	-	1,645	0	367	2,012	0	2,012
Medicare Eligible Retiree Healthcare Fund Acct Appropria	tions	1,645	0	367	2,012	0	2,012
Total, OMAO Oth Accts Discretionary Direct Obligation	0	1,645	0	367	2,012	0	2,012
Total, OMAO Oth Accts Discretionary Budget Authori	0	1,645	0	367	2,012	0	2,012
Total, OMAO Oth Accts Discretionary Appropriation	0	1,645	0	367	2,012	0	2,012
TOTAL, OTH ACCTS DISCRETIONARY DIRECT O	90,075	70,471	2,255	(179)	68,478	0	68,478
TOTAL, OTH ACCTS DISCRETIONARY BUDGET	25,875	3,471	2,255	(9,379)	(8,163)	0	(8,163)
TOTAL, CJS OTH ACCTS DISCRETIONARY APPR	93,718	71,566	283	621	71,904	0	71,904

### SUMMARY OF DISCRETIONARY RESOURCES (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted Amount	FY 2006 Terminations Amount	FY 2007 Total ATBs Amount	FY 2007 Base Amount	FY 2007 Program Changes Amount	FY 2007 Pres. Bud Request Amount
DIRECT OBLIGATIONS							
ORF Direct Obligations	2,870,278	2,813,477	412.075	44,540	2,445,942	232,901	2,678,843
PAC Direct Obligations	1,041,333	1,119,544	206,819	1,288	914,013	112,454	1,026,467
OTHER Direct Obligations	90,075	70,471	2,255	(179)	68,478	0	68,478
TOTAL Direct Obligations	4,001,686	4,003,492	621,149	45,649	3,428,433	345,355	3,773,788
DISCRETIONARY BUDGET AUTHORITY							
ORF Discretionary Budget Authority	2,872,493	2,801,848	412,075	38,540	2,434,942	232,901	2,667,843
PAC Discretionary Budget Authority	1,041,333	1,106,173	206,819	1,288	912,013	112,454	1,024,467
OTHER Discretionary Budget Authority	25,875	3,471	2,255	(9,379)	(8,163)	0	(8,163)
TOTAL Discretionary Budget Authority	3,939,701	3,911,492	621,149	30,449	3,338,792	345,355	3,684,147
<u>CJS APPROPRIATIONS</u>							
ORF CJS Appropriations	2,789,714	2,732,606	412,075	28,540	2,354,942	232,901	2,587,843
PAC CJS Appropriations	1,043,852	1,133,949	206,819	1,288	912,013	112,454	1,024,467
OTHER CJS Appropriations	93,718	71,566	283	621	71,904	0	71,904
TOTAL CJS Appropriation	3,927,284	3,938,121	619,177	30,449	3,338,859	345,355	3,684,214

### OTHER ACCOUNTS (MANDATORY) (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN	FY2005 Enacted "Currently Available BA"	FY 2006 Enacted	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base	FY 2007 Program Changes	FY 2007 Pres. Bud Request
	Amount	Amount	Amount	Amount	Amount	Amount	Amount
NOS							
Coastal Zone Management Fund Obligations	0	0	0	0	0	0	0
Coastal Zone Management Fund Budget Authority	(1,637)	(3,000)	0	0	(3,000)	0	(3,000)
Coastal Zone Management Fund Appropriation	0	0	0	0	0	0	0
Damage Assessment & Restoration Revolving Fund Obliga	16	6,000	0	0	6,000	0	6,000
Damage Assessment & Restoration Revolving Fund Budge	16	1,000	0	0	1,000	0	1,000
Damage Assessment & Restoration Revolving Fund Appro	0	0	0	0	0	0	0
Total, NOS Oth Accts Mandatory Direct Obligations	16	6,000	0	0	6,000	0	6,000
Total, NOS Oth Accts Mandatory Budget Authority	(1,621)	(2,000)	0	0	(2,000)	0	(2,000)
Total, NOS Oth Accts Mandatory Appropriation	0	0	0	0	0	0	0
ND 4EG							
NMFS	12.520	12 202	0	(10,000)	2,283	0	2,283
Promote and Develop Fisheries Obligations Promote and Develop Fisheries Budget Authority	12,539 77,539	12,283 79,283	0	(10,000)	79,283	0	79,283
Promote and Develop Fisheries Appropriation	77,339	19,283	0	0	19,283	0	19,283
1 Tomote and Develop I Isheries Appropriation	O .	· ·	Ü	· ·	U		0
Fisheries Finance Program Account Obligations	5,144	6,316	6,316	0	0	0	0
Fisheries Finance Program Account Budget Authority	5,144	6,316	6,316	0	0	0	0
Fisheries Finance Program Account Appropriation	0	6,316	6,316	0	0	0	0
Federal Ship Financing Obligations	0	3,000	0	0	3,000	0	3,000
Federal Ship Financing Budget Authority	0	(2,000)	0	0	(2,000)	0	(2,000)
Federal Ship Financing Appropriation	0	0	0	0	0	0	0
Environmental Improve & Restoration Fund Obligations	4,689	8,281	0	439	8,720		8,720
Environmental Improve & Restoration Fund Budget Author	6,836	8,281	0	439	8,720		8,720
Environmental Improve & Restoration Fund Appropriation	6,836	8,281	0	439	8,720		8,720
Limited Access System Administration Fund Obligations	3,040	7,444	0	0	7,444	0	7,444
Limited Access System Administration Fund Budget Author	3,040	7,444	0	0	7,444	0	7,444
Limited Access System Administration Fund Appropriation	3,040	7,444	0	0	7,444	0	7,444
Total, NMFS Oth Accts Mandatory Direct Obligations	25,412	37,324	6,316	(9,561)	21,447	0	21,447
Total, NMFS Oth Accts Mandatory Budget Authority	92,559	99,324	6,316	439	93,447	0	93,447
Total, NMFS Oth Accts Mandatory Appropriation	9,876	22,041	6,316	439	16,164	0	16,164
DROCD AM SUDDODT / ON A O							
PROGRAM SUPPORT / OMAO	17 574	10 504		818	10.222	^	19.322
NOAA Corp Commissioned Officers Retirement Obligatio	17,574 17,574	18,504	0	818 818	19,322 19,322	0	19,322
NOAA Corp Commissioned Officers Retirement Budget A NOAA Corp Commissioned Officers Retirement Budget A		18,504 18,504	0	818 818	19,322	0	19,322
IVOAA Corp Commissioned Officers Retirement Budget A	ppropriation	18,504	O	818	19,322		19,322
Total, PS Oth Accts Mandatory Direct Obligations	17,574	18,504	0	818	19,322	0	19,322
Total, PS Oth Accts Mandatory Budget Authority	17,574	18,504	0	818	19,322	0	19,322
Total, PS Oth Accts Mandatory Appropriation	0	18,504	0	818	19,322	0	19,322
Total, Line & Staff Office Oth Accts Mandatory Direct	43,002	61,828	6,316	(8,743)	46,769	0	46,769
Total, Line & Staff Office Oth Accts Mandatory Budge	108,512	115,828	6,316	1,257	110,769	0	110,769
Total, Line & Staff Office Oth Accts Mandatory Appro	9,876	40,545	6,316	1,257	35,486	0	35,486

#### NOAA SUMMARY (\$ in Thousands)

FY 07 PROPOSED OPERATING PLAN	FY2005 Enacted "Currently Available BA" Amount	FY 2006 Enacted Amount	FY 2006 Terminations	FY 2007 Total ATBs	FY 2007 Base	FY 2007 Program Changes Amount	FY 2007 Pres. Bud Request Amount
GRAND TOTAL Obligations (Mandatory & Discretion	4,044,688	4,065,320	627,465	36,906	3,475,202	345,355	3,820,557
GRAND TOTAL Budget Authority (Mandatory & Disc	4,048,213	4,027,320	627,465	31,706	3,449,561	345,355	3,794,916
GRAND TOTAL CJS NOAA APPROPRIATION (Ma	3,937,160	3,978,666	625,493	31,706	3,374,345	345,355	3,719,700
REIMBURSABLES	209,204	287,443		0	242,444	0	242,444
Reimbursable Obligations:  Offsetting Collections (fish fees / IFQ CDQ)  Legislative CSRS proposal  New offsetting collection (Data sales)  TOTAL REIMBURSABLE Obligations	209,204	287,443	0	0	242,444	0	242,444
Reimbursable Financing: Federal funds Non-federal funds Offset for Fee Collections (FY 2000 Magnuson Fees)	(87,204) (122,000)	(87,204) (200,239)			(186,444) (56,000)		(186,444) (56,000)
Offsetting Collection (data sales) TOTAL REIMBURSABLE Financing TOTAL OBLIGATIONS (Direct & Reimbursable)	(209,204) 4,253,892	(287,443) 4,352,763	0 627,465	0 36,906	(242,444) 3,717,646	0 345,355	0 4,063,001



United States Department of Commerce National Oceanic & Atmospheric Administration 1401 Constitution Avenue, N.W. Washington, D.C. 20230 www.noaa.gov

National Ocean Service www.nos.noaa.gov

National Marine Fisheries Service www.nmfs.noaa.gov

Office of Oceanic and Atmospheric Research www.oar.noaa.gov

National Weather Service www.nws.noaa.gov

National Environmental Satellite, Data and Information Service www.nesdis.noaa.gov

Program Support www.corporateservices.noaa.gov

Office of Marine and Aviation Operations www.omao.noaa.gov