

# NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

*Summary of the President's Budget*

*Fiscal Year 1998*

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## What is the NOAA Budget Summary?

**T**he National Oceanic and Atmospheric Administration (NOAA) Budget Summary accompanies the President's Annual Budget Request to Congress. It is designed to be a user friendly source of information on NOAA's budget for members of Congress, congressional staff, the media, NOAA constituents and anyone with an interest in NOAA programs.

The summary provides an overview of NOAA, including:

- ☒ agency-wide information;
- ☒ a detailed description of the President's FY 1998 Budget Submission to the Congress; and
- ☒ a discussion of the NOAA Strategic Plan.

***Agency-wide information*** can be found in the Executive Summary, as well as in the Appendices.

This document is a summary of the NOAA portion of the full President's Congressional Budget Submission for the Department of Commerce. The increases and decreases table in the appendix provides both the increases and decreases in the FY 1998 Budget from the FY 1997 currently available. Selected program changes also are discussed in the text of the Budget Request section.

The ***Strategic Plan section*** describes the goals and objectives NOAA has established to advance its vision for the year 2005, and provides the framework within which NOAA's programs and budget request have been developed.

(NOTE: This document is also available on the Internet from the NOAA home page, <http://www.noaa.gov>.)



# EXECUTIVE SUMMARY

## Introduction

The mission of the National Oceanic and Atmospheric Administration (NOAA) is to describe and predict changes in the Earth's environment, and conserve and manage the Nation's coastal and marine resources to ensure sustainable economic opportunities. NOAA conducts research to develop new technologies, improve operations, and supply the scientific basis for managing natural resources and solving environmental problems. NOAA's comprehensive system for acquiring observations—from satellites to ships to radars—provides the quality data and information needed for the safe conduct of daily life and the basic functioning of a modern society. Common end products and services include weather warnings and forecasts, environmental technologies, marine fisheries statistics and regulations, nautical charts, assessments of environmental changes, and hazardous materials response information. These capabilities, products and services support the domestic security and global competitiveness of the United States, and affect the lives of nearly every citizen every day.

In a period of strongly competing government priorities, the President's FY 1998 Budget Request for NOAA affirms the agency's role by providing the resources to maintain essential services, facilitate continuing progress in critical investment areas, and address statutory obligations. This proposed budget ensures an appropriate balance among the environmental assessment, prediction and stewardship needs of the Nation.

NOAA's request includes support for several Presidential Initiatives, including Clean Water, South Florida, Climate and Global Change, and GLOBE.

Compared with FY 1997, significant changes in the FY 1998 budget include:

- ❖ +\$66.2 million for continuing geostationary weather satellite development and acquisition, and +\$22.5 million to converge civilian and military polar-orbiting satellites.
- ❖ +\$22 million for NOAA's participation in the President's Clean Water Initiative, including \$4 million for the Community-Right-To-Know Project on toxics, and \$18 million for state grants, technical assistance and demonstration projects to reduce toxic runoff into coastal waters under the Coastal Zone Management program.
- ❖ +\$16.6 million to continue the President's commitment to restore the health and wealth of America's fisheries and protect species in danger of extinction.
- ❖ +\$4.9 million to ensure an operating base for the Tropical Oceans-Global Atmosphere (TOGA) system critical to the production of climate forecasts.

- ❖ +\$10.8 million for base restoration in the National Weather Service to maintain the critical mass necessary to operate infrastructure.
- ❖ +\$16.9 million to proceed with the nationwide deployment of the Advanced Weather Interactive Processing System (AWIPS).
- ❖ +\$6 million to fund costs of disestablishing the NOAA Corps.
- ❖ +\$15.2 million for construction of the Santa Cruz fisheries laboratory.
- ❖ +\$12.6 million for construction of a NOAA operations and research center at the Goddard Space Flight Center. This is offset by \$4.7 million in savings from consolidation of existing space.
- ❖ Total savings of \$172.5 million for program reductions, streamlining, and terminations.

The challenge of investing strategically in the Nation's future is accompanied by the requirement to be more effective, to identify and realize opportunities for savings and to focus the efforts of Government on what matters to people. Performance is what counts, and the FY 1998 budget includes measures which track results to the level of investment. Success in this changing world increasingly will depend on partnerships with business and industry, universities, state and local governments, and international parties. NOAA will continue to develop partnerships to leverage resources and talent, and provide the means for meeting program requirements more effectively.



## NOAA's Budget Request for Fiscal Year 1998

The total FY 1998 NOAA request is \$2,051.2 million in new total budget authority, an increase of \$78.5 million over the FY 1997 enacted level. Of this total, \$1,540.8 million are in the Operations, Research and Facilities (ORF) account, \$503.5 million are in a new Capital Assets Acquisition account, and \$6.9 million are for fisheries funds and other special accounts.

The FY 1998 President's Budget contains a number of changes to the NOAA account structure. First, is the establishment of a Capital Assets Acquisition account which will seek multi-year appropriations for capital projects contained formerly in the Operations Research and Facilities, Construction and Fleet Modernization, Shipbuilding and Conversion accounts. In addition, NOAA proposes to eliminate the Fleet Modernization, Shipbuilding and Conversion and Construction accounts and incorporates the projects not requested in the Capital Assets Acquisition account in two new activities: Facilities and Fleet Maintenance and Planning within the Operation, Research and Facilities account. A more complete description of the accounts and multi-year request is on pages 13 and 14.

The NOAA budget request includes transfers of \$66.4 million from the Department of Agriculture to the Promote and Develop Fishery Products and Research Pertaining to American Fisheries account and \$5.2 million from the Department of Interior to the Damage Assessment and Restoration Revolving Fund.

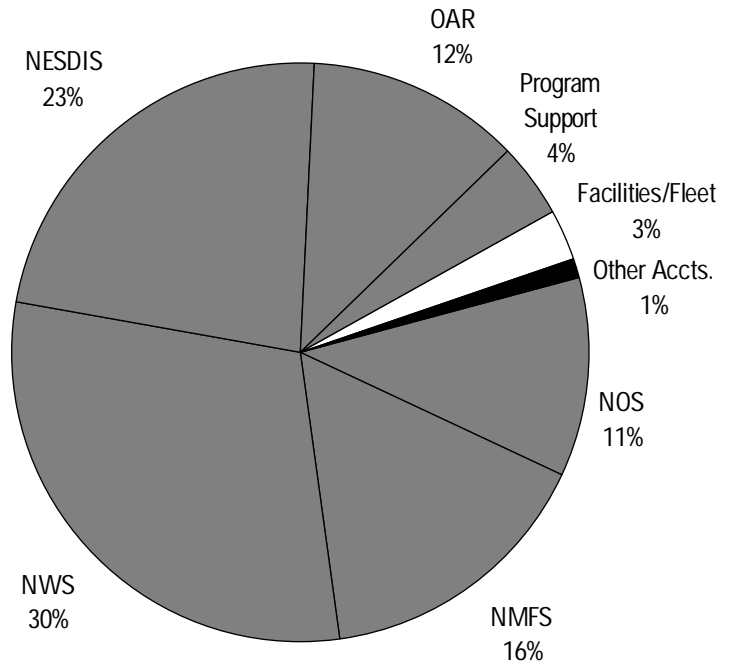
NOAA also proposes to change the Fishing Vessel Obligation Guarantee account to the Fisheries Finance Program account. This proposed change is the result of a recent amendment to the Magnuson-Stevens Fishery Conservation and Management Act that changed the program from a guarantee loan program to a direct loan program. This program includes accounts for loans previously awarded as loan guarantees and the new direct loans.

The budget also proposes an increase in the financing from the deobligation of prior year recoveries to \$24.0 million to reflect anticipated one time major contract savings of \$10 million.. The FY 1998 request reflects scoring of the spending authority for the Coastal Zone Management Fund as discretionary budget authority.

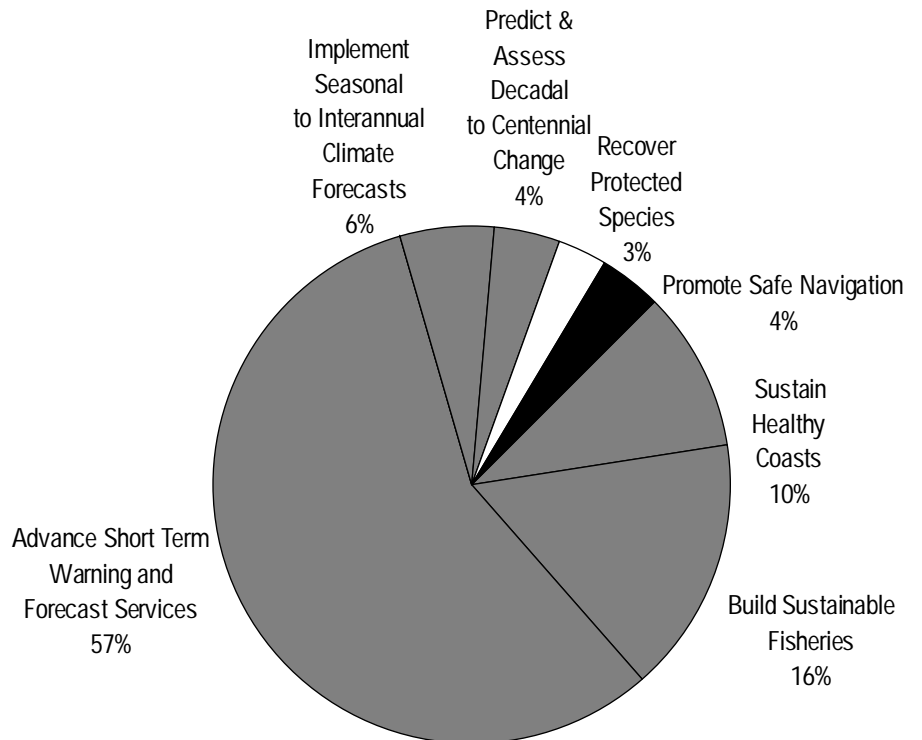
The following three pages provide summary charts and a summary table of the FY 1998 NOAA Budget Request. NOAA's budget is displayed in two formats: 1) the traditional, activity-based budget structure in which the FY 1998 President's Budget Request to the Congress is presented beginning on page 35; and 2) the goal-based approach of the NOAA Strategic Plan in which funds are distributed by strategic goal and objective beginning on page 87.

# Summary Charts of FY 1998 Budget Request

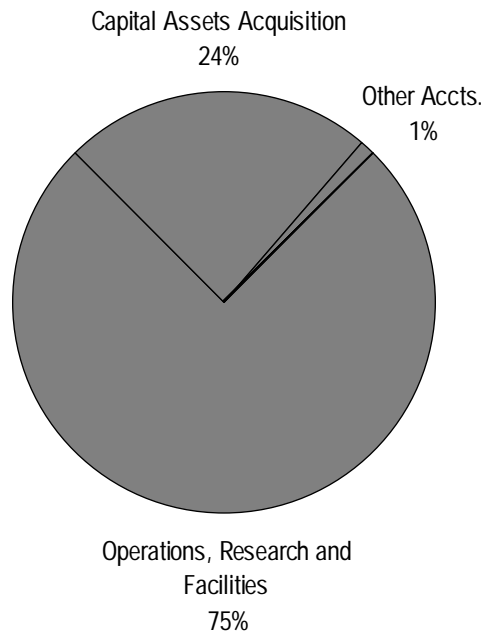
## Participation by Activity



## Strategic Plan Objectives



**Request by Account**



**Total Request for FY 1998—Budget Authority for All Accounts:  
\$2,051,234,000**

# FY 1998 NOAA Budget Request

(Dollars in Thousands)

|   | FY 1997<br>Currently<br>Available | FY 1998<br>Request | Increase/<br>(Decrease) |
|---|-----------------------------------|--------------------|-------------------------|
| Traditional Budget Structure:                                     |                                   |                    |                         |
| Operations, Research and Facilities (ORF):                        |                                   |                    |                         |
| National Ocean Service  | \$205,926                         | \$224,836          | \$18,910                |
| National Marine Fisheries Service                                 | 321,696                           | 338,264            | 16,568                  |
| Oceanic and Atmospheric Research                                  | 253,169                           | 248,050            | (5,119)                 |
| National Weather Service  | 637,997                           | 503,763            | (134,234)               |
| National Environmental Satellite, Data<br>and Information Service | 447,582                           | 149,485            | (298,097)               |
| Program Support   | 71,697                            | 77,158             | 5,461                   |
| Facilities  | 0                                 | 17,603             | 17,603                  |
| Fleet Maintenance and Planning                                    | 0                                 | 11,823             | 11,823                  |
| Rescission - Unobligated Satellite Balances (20,000)              | 0                                 | 0                  | 20,000                  |
| Rent Savings  | 0                                 | (4,656)            | (4,656)                 |
| <b>Total Direct Obligations (ORF)</b>                             | <b>1,918,067</b>                  | <b>1,566,326</b>   | <b>(351,741)</b>        |
| Recoveries from prior years/Other                                 | (15,500)                          | (25,500)           | (10,000)                |
| <b>Total Budget Authority (ORF)</b>                               | <b>1,902,567</b>                  | <b>1,540,826</b>   | <b>(361,741)</b>        |
| Transfers   | (71,500)                          | (67,581)           | 3,919                   |
| Appropriation (general fund - net) - ORF                          | 1,831,067                         | 1,473,245          | (357,822)               |
| Offsetting Collections  | 3,000                             | 0                  | (3,000)                 |
| Appropriations (with collections) - ORF                           | 1,834,067                         | 1,473,245          | (360,822)               |
| Capital Assets Acquisition Account                                | 0                                 | 503,464            | 503,464                 |
| Construction and Fleet  | 66,250                            | 0                  | (66,250)                |
| Other Accounts - Budget Authority                                 | 3,927                             | 6,944              | 3,017                   |
| <b>Total NOAA Budget Authority</b>                                | <b>1,972,744</b>                  | <b>2,051,234</b>   | <b>78,490</b>           |
| Mandatory Funds   | (61,981)                          | (61,645)           | 336                     |
| <b>Discretionary - Budget Authority</b>                           | <b>1,910,763</b>                  | <b>1,989,589</b>   | <b>78,826</b>           |
|   | FY 1997<br>Currently<br>Available | FY 1998<br>Request | Increase/<br>(Decrease) |
| Strategic Plan Goals - All Accounts                               |                                   |                    |                         |
| Advance Short-term Warning<br>and Forecast Services               | 1,139,483                         | 1,178,434          | \$38,951                |
| Implement Seasonal to<br>Interannual Climate Forecasts            | 112,212                           | 115,263            | 3,051                   |
| Predict and Assess Decadal to Centennial<br>Climate Change        | 87,409                            | 90,630             | 3,221                   |
| Promote Safe Navigation   | 91,869                            | 84,690             | (7,179)                 |
| Build Sustainable Fisheries                                       | 326,923                           | 331,993            | 5,070                   |
| Recover Protected Species   | 62,699                            | 69,719             | 7,020                   |
| Sustain Healthy Coasts  | 193,549                           | 212,241            | 18,692                  |
| Financing   | (41,400)                          | (31,736)           | 9,664                   |
| <b>Total NOAA Budget Authority</b>                                | <b>1,972,744</b>                  | <b>2,051,234</b>   | <b>78,490</b>           |
| Mandatory Funds   | (61,981)                          | (61,645)           | 336                     |
| <b>Discretionary - Budget Authority</b>                           | <b>1,910,763</b>                  | <b>1,989,589</b>   | <b>78,826</b>           |

## Changes to the Account Structure

The creation of the Capital Assets Acquisition Account (CAA) responds to the requirements of the Federal Acquisition Streamlining Act of 1994 and the Information Technology Management Reform Act of 1996 and includes capital projects contained formerly in the Operations Research and Facilities (ORF) account and the Construction account within the National Oceanic and Atmospheric Administration. Although no funding is currently identified, this account would also contain any requests for Fleet Replacement previously requested in the Fleet Modernization, Shipbuilding and Conversion account.

Placing these projects in this account is consistent with the Administration's fixed asset policy by seeking advanced appropriations for multi-year projects (see following table). The Administration supports full funding as part of an ongoing attempt to improve cost and performance of agency procurement. The Administration's goal is to ensure that capital assets support core/priority missions of the agency; the assets have demonstrated a projected return on investment that is clearly articulated, cost-benefits of acquisition have been evaluated, and to help ensure accountability.

The projects included in this account support NOAA's operational mission across all line offices. In particular, projects related to the National Weather Service modernization and on-going operations are included. Increased funds are proposed for deployment of Advanced Weather Interactive Processing Systems (AWIPS), as well as current and follow-on geostationary satellites. Funds are also requested for new construction of a Fisheries laboratory in Santa Cruz, California, and a new facility at the Goddard Space Center.

With the creation of the Capital Acquisition Account (CAA) to provide funding for multi-year projects, the need for separate Construction and Fleet Shipbuilding and Conversion accounts is eliminated, because like the CAA, these accounts were established to facilitate the funding of multi-year projects without impacting the overall ORF outlay rate and to avoid jeopardizing operational, base programs. Funds for projects that have outlay rates more in line with the overall ORF outlay rates such as facility and ship maintenance are requested, beginning in FY 1998 within the ORF account under two new activities—Facilities, and Fleet Maintenance and Planning. A table, Bridge of Changes From FY 1997 to FY 1998 in the Appendix, provides a more detailed layout of these changes.

# Capital Assets Acquisition

(dollars in thousands)

|  | FY 1997<br>Approp. | FY 1998  | FY 1999  | FY 2000 | FY 2001 | FY 2002 | FY 2003<br>To<br>FY 2010 | Total     |
|--|--------------------|----------|----------|---------|---------|---------|--------------------------|-----------|
| <b>CAPITAL ASSETS ACQUISITION:</b>               |                    |          |          |         |         |         |                          |           |
| NEXRAD   |                    | \$11,377 | \$11,224 | \$8,697 | \$9,202 | \$8,563 | 10,000                   | 59,063    |
| ASOS   |                    | 4,494    | 4,705    | 4,025   | 6,755   | 6,135   | 5,000                    | 31,114    |
| AWIPS  |                    | 116,910  | 69,391   |         |         |         |                          | 186,301   |
| Computer Facility Upgrades                       |                    | 5,910    | 10,200   | 8,800   | 8,800   | 8,800   | 8,800                    | 51,310    |
| POES K-N'  |                    | 82,905   | 172,684  | 129,030 | 85,271  | 75,157  | 181,133                  | 726,180   |
| GOES I - M                                       |                    | 89,854   | 102,100  | 75,475  | 70,375  | 24,975  | 2,500                    | 365,279   |
| GOES N - Q                                       |                    | 147,819  | 256,421  | 315,970 | 293,517 | 239,300 | 1,147,540                | 2,400,567 |
| Goddard Facility                                 |                    | 12,572   | 74,825   | 1,299   | 2,696   | 9,379   | 838                      | 101,609   |
| Boulder Lab ASC                                  |                    | 1,900    | 9,078    |         | 10,978  |         |                          |           |
| WFO Construction                                 |                    | 13,823   | 8,189    | 6,082   | 3,432   | 2,832   |                          | 34,358    |
| NCEP   |                    | 700      | 809      | 1,313   |         | 2,822   |                          |           |
| Santa Cruz/Tiburon                               |                    | 15,200   | 4,200    | 19,400  |         |         |                          |           |
| Subtotal, Capital Assets Acquisition             |                    | 503,464  | 723,826  | 550,691 | 480,048 | 375,141 | 1,355,811                | 3,988,981 |
| <b>NON-CAPITAL PORTION (ORF):</b>                |                    |          |          |         |         |         |                          |           |
| Radiosonde Replacement Network                   | 1,500              | 910      | 2,410    |         |         |         |                          |           |
| NEXRAD   | 53,145             | 39,591   | 39,887   | 40,576  | 40,076  | 40,076  | 253,351                  |           |
| ASOS   | 10,056             | 5,341    | 5,237    | 5,070   | 4,970   | 4,870   | 35,544                   |           |
| AWIPS  | 100,000            | 12,638   | 33,057   | 20,385  | 14,373  | 180,453 |                          |           |
| Computer Facility Upgrades                       | 14,000             | 8,000    | 3,200    | 200     | 200     | 200     | 25,800                   |           |
| POES K-N'  | 147,300            | 147,300  |          |         |         |         |                          |           |
| Polar Satellite Convergence (NPOESS)             | 29,000             | 51,503   | 35,000   | 65,000  | 104,000 | 149,000 | 433,503                  |           |
| GOES I - M                                       | 110,621            | 110,621  |          |         |         |         |                          |           |
| GOES N - Q                                       | 60,859             | 60,859   |          |         |         |         |                          |           |
| Rent offsets to finance Goddard                  |                    | (4,656)  | (4,656)  | (4,656) | (4,656) | (4,656) | (23,280)                 |           |
| Boulder Lab ASC                                  | 2,000              | 2,000    |          |         |         |         |                          |           |
| WFO Construction                                 | 12,000             | 12,000   |          |         |         |         |                          |           |
| Fleet Modernization                              | 8,000              | 11,823   | 11,823   | 11,823  | 11,823  | 11,823  | 67,115                   |           |
| Subtotal, ORF Components                         | 548,481            | 112,512  | 103,129  | 151,070 | 176,798 | 215,686 | 1,307,676                |           |
| <b>TOTAL PROGRAM, CAPITAL &amp; NON-CAPITAL:</b> |                    |          |          |         |         |         |                          |           |
| Radiosonde Replacement Network                   | 1,500              | 910      | 2,410    |         |         |         |                          | 2,410     |
| NEXRAD   | 53,145             | 50,968   | 51,111   | 49,273  | 49,278  | 48,639  | 10,000                   | 312,414   |
| ASOS   | 10,056             | 9,835    | 9,942    | 9,095   | 11,725  | 11,005  | 5,000                    | 66,658    |
| AWIPS  | 100,000            | 116,910  | 82,029   | 33,057  | 20,385  | 14,373  |                          | 366,754   |
| Computer Facility Upgrades                       | 14,000             | 13,910   | 13,400   | 9,000   | 9,000   | 9,000   | 8,800                    | 77,110    |
| POES K-N'  | 147,300            | 82,905   | 172,684  | 129,030 | 85,271  | 75,157  | 181,133                  | 873,480   |
| Polar Satellite Convergence (NPOESS)             | 29,000             | 51,503   | 35,000   | 65,000  | 104,000 | 149,000 | 0                        | 433,503   |
| GOES I - M                                       | 110,621            | 89,854   | 102,100  | 75,475  | 70,375  | 24,975  | 2,500                    | 475,900   |
| GOES N - Q                                       | 60,859             | 147,819  | 256,421  | 315,970 | 293,517 | 239,300 | 1,147,540                | 2,461,426 |
| Goddard Facility (net of rent offsets)           |                    | 7,916    | 70,169   | (3,357) | (1,960) | 4,723   | 838                      | 78,329    |
| Boulder Lab ASC                                  | 2,000              | 1,900    | 9,078    |         |         |         |                          | 12,978    |
| WFO Construction                                 | 12,000             | 13,823   | 8,189    | 6,082   | 3,432   | 2,832   |                          | 46,358    |
| NCEP   |                    | 700      | 809      | 1,313   |         |         |                          | 2,822     |
| Santa Cruz/Tiburon                               |                    | 15,200   | 4,200    | 19,400  |         |         |                          | 19,400    |
| Fleet Modernization                              | 8,000              | 11,823   | 11,823   | 11,823  | 11,823  | 11,823  | 67,115                   |           |
| Total Program, Capital & Non-Capital             | 548,481            | 615,976  | 826,955  | 701,761 | 656,846 | 590,827 | 1,355,811                | 5,296,657 |

## Highlights of the FY 1998 Request

**N**OAA's budget request of \$2.051 billion in new budget authority for FY 1998 is predicated on the need to ensure the continued delivery of essential science, technology and services to the Nation. Highlights of the request are presented, as follows, in the context of the NOAA Strategic Plan and with an emphasis on the major operational units and programs contributing to the strategic goals. The Strategic Plan establishes the seven major goals of the agency, and guides the most effective combined application of the entire suite of agency assets for attaining these goals, which are grouped into two missions—Environmental Stewardship, and Environmental Assessment and Prediction. Resources for program administration, acquisition of data, aircraft services, and supporting infrastructure are included in the total request for each strategic goal, and are described in greater detail beginning on page 35.





# Environmental Assessment and Prediction Mission

## *Advance Short-Term Warning and Forecast Services*

### **Total Request: \$1,178,434,000**

NOAA requests \$1,178.4 million to address this strategic goal, a net increase of \$39.0 million over FY 1997. The objectives are to:

- ❖ complete weather service modernization;
- ❖ maintain operational satellite coverage;
- ❖ strengthen observing and prediction systems;
- ❖ improve customer service to the public.

These objectives will be accomplished primarily through the efforts of the National Weather Service (NWS), the National Environmental Satellite, Data and Information Service (NESDIS) and the Office of Oceanic and Atmospheric Research (OAR). For the NWS, the request includes: \$438 million to support the current operational and research infrastructure and continue planned streamlining activities under the modernization, a net decrease of \$8.1 million from 1997; and \$191.6 million for major systems acquisition supporting the modernization, a net increase of \$14.4 million. Within the total amount for systems acquisition, the request includes \$116.9 million for continued deployment of the Advanced Weather Interactive Processing System (AWIPS), an increase of \$16.9 million over 1997. For NESDIS, \$372.0 million is needed to ensure continuous GOES and Polar-orbiting satellite coverage including environmental observing services, a decrease of \$1.1 million from 1997; and \$51.5 million is required to meet NOAA's commitment to share development costs with the Department of Defense for the National Polar-orbiting Operational Environmental Satellite System, an increase of \$22.5 million over 1997. For OAR, a total of \$49.6 million is requested to advance the science of weather forecasting over land, sea and space, and to improve weather-related observing technologies, a decrease of \$2.4 million from 1997.

The scientific and capital investment required for the modernization of weather services—including radars and satellites, advanced computer models and communications systems, and field restructuring—is paying off with lives saved, property damages avoided, and impacts mitigated for weather-sensitive sectors of the economy. During 1996, NWS forecasters issued numerous tornado warnings with lead times in excess of 15 minutes, reducing the loss of life. During Hurricane Fran, warnings were issued 31 hours before the storm made landfall; flood potential statements were issued two to three days in advance as

the storm headed north; and six hours of advance notice were provided for flash flooding. In January of 1996, the NWS issued three- to five-day advance forecasts of the east coast blizzard, prompting emergency authorities to significantly enhance response preparations and airlines to move their air fleets from affected regions. These results show that improved warning and forecast services are enhancing public safety and the economic productivity of the nation. Once modernization is completed, the nation should realize annual benefits to the economy of some \$7 billion.

### *Implement Seasonal to Interannual Climate Forecasts*

#### **Total Request: \$115,263,000**

NOAA requests \$115.3 million to address this strategic goal, a net increase of \$3.1 million over FY 1997. The objectives are to:

- ❖ deliver useful climate forecasts and information;
- ❖ enhance observing and data systems providing input to model predictions;
- ❖ invest in process and modeling research leading to improved predictions; and
- ❖ assess the impacts of climate variability on human activity and economic potential.

These objectives will be accomplished primarily through the efforts of the NOAA Climate and Global Change Program, the OAR Environmental Research Laboratories (ERLs), NESDIS, and the NWS' National Centers for Environmental Prediction. For OAR, the request provides \$66.8 million to: develop operational ENSO observations, including an increase of \$4.9 million over 1997 to ensure an operating base for the Tropical Oceans-Global Atmosphere (TOGA) system and reflect the maintenance responsibilities from NOAA's Climate and Global Change program; improve dynamical seasonal prediction activities at the National Centers for Environmental Prediction, including automating the production of climate forecasts and delivering forecast and monitoring products; support the International Research Institute for climate prediction; improve climate modeling over North America; and assess socio-economic impacts. For NESDIS, \$37.2 million is needed for observing and data systems and data management requirements including the National Climatic Data Center, for improvements to the satellite active archive, and for linking NESDIS data centers and other NOAA centers of data via a virtual data system. In addition, \$2.8 million is requested for the National Ocean Service (NOS) to maintain and improve observing and data delivery systems that support climate forecasting requirements, and \$4.7 million is requested for the NWS to provide operational climate predictions and analyses under central forecast guidance, and update products on delivery systems.

Emerging capabilities to forecast climate are the result of federal investments in basic research, development and deployment of global observing and data systems, and transition of research findings to operational needs. Climate services will be as important to 21st century economies and societies as weather forecasting is today, and the future capacity to deliver uniform climate information will continue to depend strongly on federal support for process and modeling research, and for the collection of global data needed to initialize and validate climate models. For example, the insurance industry has become increasingly vocal in its support of the essential science underlying climate prediction, due to the tremendous economic impact of weather-related natural disasters. According to the Worldwatch Institute's 1996 State of the World report, since 1990, insurance providers worldwide have paid out \$48 billion for weather-related losses, compared with losses of \$14 billion for the entire decade of the 1980's.

### *Predict and Assess Decadal to Centennial Change*

#### **Total Request: \$90,630,000**

NOAA requests \$90.6 million to address this strategic goal, a net increase of \$3.2 million over FY 1997. The objectives are to:

- ❖ characterize the agents and processes that force climate change;
- ❖ examine the role of the ocean in influencing change;
- ❖ ensure a long-term climate record;
- ❖ guide the rehabilitation of the ozone layer;
- ❖ provide the scientific basis for improved air quality by understanding and monitoring surface ozone; and
- ❖ develop predictive models scientific assessments, and human impacts information related to long-term change.

These objectives will be accomplished largely through the efforts of the NOAA Climate and Global Change Program and OAR. In OAR, the request includes: \$28.7 million for climate and global change research in increase of \$1.9 million; \$7 million for the Global Learning and Observations to Benefit the Environment (GLOBE) Program, an increase of \$1 million over 1997; \$25.9 million for long-term climate and air quality research, including an increase of \$1 million for NOAA's health of the atmosphere initiative in preparation for the Nation's first scientific air quality assessment; \$1.5 million for advanced computing support; and \$7.7 million for improving the understanding of the role of oceans in influencing climate change. In addition, \$3.2 million is requested in NESDIS for data and information services supporting the long-term climate

record; and \$8.2 million is needed in the NWS to continue to provide temperature, precipitation, evaporation and river stage data for climatic and hydrologic monitoring and services.

In collaboration with university, government and international partners, NOAA provides the measurements, research, models, predictions and assessments that form the scientific basis for understanding global change phenomena. For over three decades of long-term monitoring, NOAA has produced incontestable evidence that carbon dioxide is increasing in the atmosphere. NOAA also has documented a decrease in tropospheric levels of ozone-depleting chemicals, a first-time observation that demonstrates the emerging effectiveness of the Montreal Protocol. Late in 1995, the U.N. Intergovernmental Panel on Climate Change (IPCC) released findings indicating that temperature may increase 1 to 3.5 degrees Celsius, and sea level may rise 15 to 95 centimeters, by the year 2100. These global trends will affect both natural processes and human systems, including agriculture, energy, and the worldwide transmission of diseases. NOAA played a lead role in developing the science assessments upon which the IPCC report was based. Decisions on actions to mitigate anticipated changes on the order of decades to centuries will never receive domestic and international backing unless they are supported by sound science. NOAA continues to work to provide leadership and science-based information for these types of decisions, focusing on climate change and greenhouse warming, ozone layer depletion, and air quality improvement.

### *Promote Safe Navigation*

#### **Total Request: \$84,690,000**

NOAA requests \$84.7 million to address this strategic goal, a net decrease of \$7.2 million from FY 1997. The objectives are to:

- ❖ deliver a digital nautical charting database to underpin new electronic navigational systems;
- ❖ update nautical surveys using full-bottom coverage technologies;
- ❖ install systems to provide mariners with real-time observations and forecasts of water levels, tides and currents, and weather conditions in major ports;
- ❖ transform the obsolete geodetic reference frame into a Global Positioning System-based system; and
- ❖ provide for the two-year transition of aeronautical charting to the Federal Aviation Administration (FAA).

These objectives will be accomplished largely through NOS's mapping, charting and geodesy, and observation and prediction subactivities. NOS requires \$36.1

million to update nautical surveys and deliver digital nautical charting databases, including the production of raster nautical charts, a decrease of \$1.9 million from 1997. This request amount includes a \$12.6 million replacement of funds to support map compilation and database management activities formerly reimbursed by the Defense Mapping Agency, and a \$14.5 million decrease for the first stage of a two-year transfer of the aeronautical charting program to the FAA. During FY 1998, NOAA will continue the timely and accurate processing and delivery of aeronautical information for air traffic control and aeronautical safety, but on a reimbursable basis with the FAA. In FY 1999, both the funding and the personnel required for conducting this work will be fully assumed by the FAA. NOS also requires \$23.2 million to acquire oceanographic and hydrographic data and to make available marine predictions and advanced oceanographic observations important to pilots and port authorities, a decrease of \$5.0 million from 1997; and \$19.2 million to provide a national spatial reference system that utilizes the Global Positioning System for navigation and positioning, a decrease of \$1 million from 1997.

Sea-going commerce has tripled in the last 50 years, and 98 percent of our international trade by weight moves through U.S. ports. Fifty percent of the total tonnage is oil or other hazardous material. Despite the risk that accompanies increasing traffic, and the competitive advantage of modern observations and systems, much of the Nation's charting and geodetic infrastructure is not up to world standards. Accurate charts and modern navigation systems are required for safe and efficient maritime transport. NOAA collects, processes and distributes such information in support of national, commercial and individual needs. NOAA is working to modernize U.S. marine and air navigation, mapping and surveying, and to provide a precise satellite-derived reference system as the basis for the nation's 21<sup>st</sup> century positioning needs. For example, during 1996, NOAA's NOS produced 235 new editions of nautical charts and 14,682 new aeronautical charts and associated products; acquired and processed data from 50 hydrographic surveys and two airborne laser surveys; reduced the data-to-chart time from years to six months by implementing a "just-in-time" delivery system for applying new hydrographic data to nautical chart editions; and installed 153 Federal Base Network stations, and 47 continuously operating reference stations, that will form the basic positional framework for the Nation's future spatial data infrastructure.

# Environmental Stewardship Mission

## *Build Sustainable Fisheries*

### **Total Request: \$331,993,000**

NOAA requests \$332.0 million to address this strategic goal, a net increase of \$5.1 million over FY 1997. The objectives are to:

- ❖ assess the status of fishery resources;
- ❖ advance fishery predictions;
- ❖ manage for economic growth by developing plans for reducing excessive fishing and capital investment;
- ❖ ensure adequate compliance with fishery regulations; and
- ❖ provide research and services for fishery-dependent industries to maximize benefits from marine resources.

These objectives will be accomplished primarily through the efforts of the National Marine Fisheries Service (NMFS), OAR and NOAA's Coastal Ocean Program (COP). For NMFS, the request is \$256.3 million (this includes \$19.4 million for Acquisition of Data previously funded in the Marine Services line item), an increase of \$7.6 million over 1997 to: collect, evaluate and disseminate fisheries data including developing strategies for bycatch reduction; conduct conservation and management operations including funding of Regional Fishery Management Councils for developing and amending fishery management plans; execute provisions of the recently-passed Magnuson-Stevens Fishery Conservation and Management Act including providing for new national standards and implementing essential fish habitat requirements; improve at-sea and shoreside compliance; and provide grants and other assistance for fisheries development programs. NOAA also requests \$23.0 million to address new facilities needs, including the Tiburon, California fisheries laboratory, and to maintain existing laboratories. For OAR, funding of \$23.5 million in the Sea Grant Program, National Undersea Research Program (NURP), and marine prediction research subactivities is needed to: improve technologies for tracking and estimating aquatic biomass; advance aquaculture and economic growth initiatives; apply new computing techniques; and provide for other research activities including in-situ undersea research. For COP, \$7.4 million is requested to strengthen abilities to assess and predict natural and human-induced changes and their impact on fisheries health.

There is a strong consensus among lawmakers, fishery managers, the fishing industry and the public, that depleted fishery resources must be restored and healthy fisheries must be maintained and managed for greater efficiency. Of the

fishery stock groups under the purview of NOAA for which population status is known, 36 percent are overutilized. Even fisheries that are producing a large catch are doing so with unnecessary cost and waste. Well-managed fisheries produce significant and continuous benefits, such as the \$1 billion Alaskan groundfish fishery. Controlled access measures implemented in the \$180 million Alaskan halibut/sablefish fishery have resulted in reduced accidents and property loss, increased economic value of the resource, and reduced bycatch. Since 1994, NOAA has increased the number of fishery management plans with access controls implemented by nearly 30 percent. NOAA estimates that restoring fisheries will have a potential \$25 billion total positive impact on the national economy.

NOAA is providing the federal leadership and support to make this happen. Accurate and timely resource assessments are being used to guide management decisions. NMFS, the Coastal Ocean Program, the National Sea Grant College Program, OAR's Environmental Technology Laboratory, and other parts of NOAA, are conducting research to advance fishery predictions, reduce costs of conventional stock assessments, develop advanced remote sensing techniques, improve fishery habitat and mitigate harmful algal blooms. The recently reauthorized Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) strengthens the ability of NMFS and the eight Regional Fisheries Management Councils to apply the results of research in adopting management measures that will ensure sustainable fisheries for the Nation. Enforcement is carried out to ensure compliance with regulations, and NOAA is working with state and international partners to develop policies for managing fisheries that occupy multiple geo-political zones. In addition, NOAA continues to design and implement harvest capacity reduction programs, and programs to provide fishermen with economic and technical support during stock rebuilding efforts.

### *Recover Protected Species*

#### **Total Request: \$69,719,000**

NOAA requests \$ 69.7 million to address this strategic goal, a net increase of \$7.0 million over FY 1997. The objectives are to:

- ❖ assess the status of, and impacts to, protected species; and
- ❖ develop and implement conservation and recovery plans for depleted marine mammals and endangered and threatened species.

These objectives will be accomplished primarily through the efforts of NMFS. The request includes: \$37.8 million for status reviews and stock assessments; and \$25.8 million, an increase of \$7.4 million over 1997, for developing recovery, conservation and take reduction plans for the management of protected and depleted species. The requested increase will ensure that NMFS can address major responsibilities for responding to West Coast salmon listings and

steelhead species under the Endangered Species Act (ESA), expand recovery actions for endangered Kemp's ridley turtles, strengthen Atlantic right whale recovery efforts, and establish cooperative conservation program agreements under the ESA with additional states, including Alaska, California and Washington.

The existence of the Marine Mammal Protection Act, the Endangered Species Act and other legislation provides a clear indication of public support for strong efforts to conserve living marine resources. The desired outcome of this effort is to recover species in danger of extinction in a manner compatible with the sustainable use of marine resources. During 1996, NMFS initiated four marine mammal take reduction plans and updated fifty marine mammal stock assessments, strengthened turtle excluder device requirements and increased cooperation with Mexico to maximize hatchling production of turtles, and conducted hundreds of ESA §7 and §10 consultations. These and other accomplishments have improved the status of species while minimizing the impact of conservation measures on economic and social activities.

### *Sustain Healthy Coasts*

#### **Total Request: \$212,241,000**

NOAA requests \$ 212.2 million to address this strategic goal, a net increase of \$18.7 million over FY 1997. The objectives are to:

- ❖ protect, conserve and restore coastal habitats and their biodiversity;
- ❖ promote clean coastal waters to sustain living marine resources and ensure safe recreation, healthy seafood and economic vitality; and
- ❖ foster well-planned and revitalized coastal communities that sustain coastal economies, are compatible with the natural environment, and minimize the risks from natural hazards.

These objectives will be accomplished primarily through the efforts of NOS, COP, OAR, NMFS and NESDIS. For NOS, the request includes \$128.4 million, an increase of \$26.5 million over 1997 for: pollution response, damage assessment and restoration needs; estuarine and coastal monitoring and assessment activities; support for estuarine reserves and marine sanctuaries; conduct of NOAA's Coastal Zone Management program; and NOAA's continuing work in interagency environmental initiatives, including the President's Clean Water Initiative and restoration of the South Florida ecosystem. For COP, \$7.7 million is needed to support regional-scale modeling and prediction of cumulative impacts of multiple stressors on habitats and living marine resources. In OAR, \$37.7 million, a decrease of \$7.1 million from 1997, is requested for research, outreach and technology development through Sea Grant, NURP and the ERLs on coastal issues such as: control and prevention of nonindigenous species;



monitoring, assessment and restoration of degraded habitat and water quality; reduction of non-point source pollution; fate of toxic chemicals; impacts of harmful algal blooms; and community preparedness for coastal hazards including hurricanes and oil spills. For NMFS, the request includes \$19.7 million for identifying essential fish habitat for fishery management plans, providing technical support for improving wetlands, and conducting permit reviews for projects affecting living marine resources including licensing of dams. Much of NMFS effort in FY 1998 will be focused on actions that contribute to the recovery of endangered West Coast salmon and steelhead species. In addition, \$4.9 million is required in NESDIS for data and information services related to improving the understanding of coastal functions and for ocean remote sensing.

Maintaining the health, productivity and biodiversity of coastal ecosystems is essential to the sustainable development of coastal economies and the future welfare of the Nation. This goal addresses the practical needs and concerns of resource managers, as well as strengthening the watershed and regional management frameworks provided by state Coastal Zone Management programs. This is an enormous challenge considering that well over half of the U.S. population lives on the 10% of land defined as coastal. Coastal concerns require integrated solutions because problems transcend state and natural boundaries. Successful management of these biologically, geographically and economically complex areas depends strongly on federal guidance and collaboration, such as with the unveiling of the final management plan for the Florida Keys National Marine Sanctuary and the conditional approval of 27 of 29 states' coastal non-point pollution programs, during 1996.

In addition to activities stressing planning, prevention and sustainable use, NOAA provides monitoring and rapid response capabilities to limit harm to ecosystems affected by human intervention. During 1996, NOAA completed the first Nationwide assessment of the spatial extent of toxic contaminants in sediments and bivalves in coastal waters, documented the magnitude and extent of contaminants in heavily contaminated Boston Harbor, and provided technical and scientific assistance to the Coast Guard at 70 oil and chemical spills.

## Committee on Environment and Natural Resources

**T**hrough the National Science and Technology Council's (NSTC) Committee on Environment and Natural Resources (CENR), NOAA works with other federal agencies and non-governmental experts to design and prioritize the government's environment and natural resources research and development agenda. This interagency planning and coordination ensures the effective application of available resources.

The NSTC has identified Improving Environmental Quality as one of its six goals. Improving environmental quality requires supporting a broad and comprehensive research agenda, including: 1) observing, documenting, understanding, assessing and predicting environmental change and its consequences; 2) using natural resources in a sustainable manner; 3) understanding and preserving biodiversity; and 4) developing analytical tools that integrate social, economic and natural sciences to support policy formulation. NOAA's fisheries and protected species programs are embodied in this priority area of concern.

Agencies are expected to continue strong support of a number of ongoing interagency programs and initiatives that are priorities for FY 1998, and in which NOAA will participate. These include:

- ❖ The U.S. Global Change Research Program, with increased emphasis on consequences of changes on humans and ecosystems, particularly at regional levels;
- ❖ The North American Research Strategy for Tropospheric Ozone;
- ❖ National Environmental Monitoring and Research Initiatives;
- ❖ Natural disaster reduction (including the Hazard Information and Loss Reduction Initiative), with enhanced international cooperation in science and technology to reduce the damage to communities caused by natural disasters through improved monitoring, mitigation and response;
- ❖ Environmental technologies, with an emphasis on energy efficiency R&D and lowering carbon dioxide emissions;
- ❖ Endocrine disruptor research, focusing on understanding how low concentrations of chemicals can affect the growth and reproduction of living marine mammals;
- ❖ Social and economic aspects of environmental change.

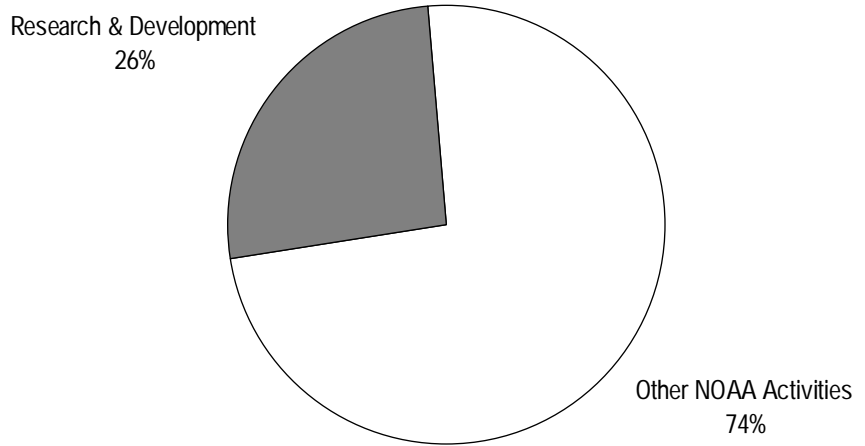
The following charts exhibit the research and development (R&D) portion of NOAA's budget request, and how NOAA's major activities support the Administration's environmental investments for FY 1998.

NOAA R&D is the systematic study to gain knowledge or understanding necessary to determine the means by which a recognized and specific need may be met.

Both R&D and environmental investments are two different crosscuts of NOAA's budget, but overlap in many areas.

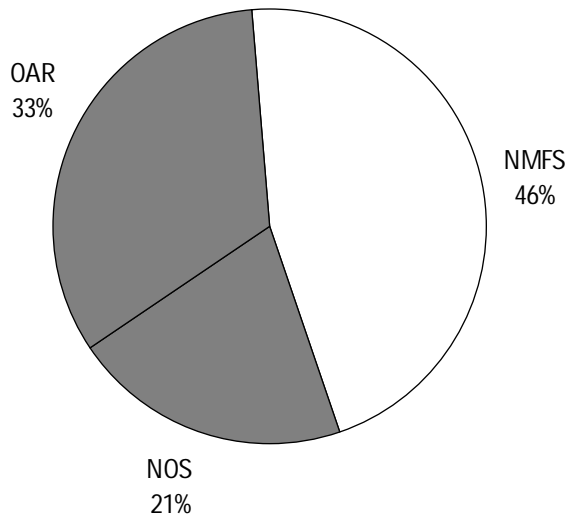
# FY 1998 Research & Development and Environmental Investments

## Research & Development vs. All Other Activities



*Total R&D: \$524,698,000*

## Environmental Investments by Budget Authority



*Total Environmental Investments: \$686,963,000*

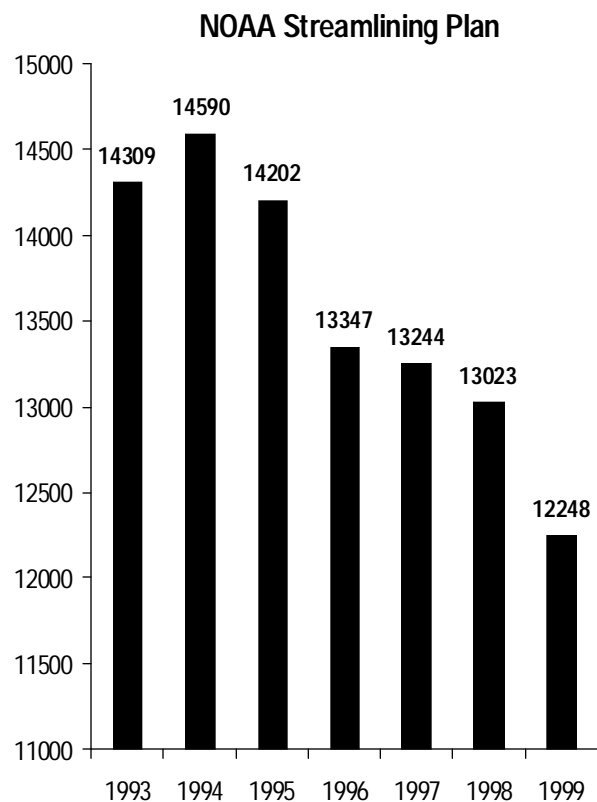
## Reducing Costs and Improving Effectiveness

In an environment of tightening dollars and increasingly complex challenges, NOAA is reducing costs and improving program effectiveness. NOAA is saving money through streamlining personnel and processes, outsourcing where appropriate, and leveraging external resources and talent. NOAA holds managers accountable for results, and for using performance measures to validate progress. The highest priority continues to be to ensure that critical services are provided well.

### *National Performance Review, Streamlining and Reinvention*

In an effort to create a government that works better and costs less, NOAA is re-inventing itself and achieving the goals outlined in the National Performance Review (NPR). Weather service modernization is reinvention in the making. Owing to the range and effectiveness of new technologies, the NWS is realigning its field structure to reduce the number of offices from over 300 to 119. A National Institute of Standards and Technology study shows that every dollar spent on weather service modernization buys eight dollars in benefits for the taxpayer. Due to this capital investment in technology, and the application of advanced scientific understanding—much of which has been developed in NOAA—the U.S. now commands the most modern and efficient weather service in the world. In addition, NOAA is reinventing the National Undersea Research Program to focus research priorities on mission needs and to provide for the competitive allocation of funds, and creating a NOAA Virtual Data Center to handle the growing demand for environmental data through a logically centralized and physically distributed system to enable customers to locate, browse, and acquire data without human intervention. A brief status of formal NOAA NPR initiatives follows:

**Streamlining personnel and processes.** By 1999, NOAA plans to have reduced its workforce by 14 percent from 1993 levels. This will require the elimination of 2,061 full-time equivalents (FTEs) through phased annual reductions in the NOAA Streamlining Plan (see graph below). NOAA proposes in FY 1998 to begin to transfer to the FAA the production of aeronautical charts. In FY 1998,



*Note: 1993-1995, actual; 1996-1997, enacted; 1998, request; 1999, estimate.*

NOAA will operate the aeronautical charting program on a fully reimbursable basis, with the entire program, including FTEs, being fully transferred to FAA in FY 1999. NOAA has simplified administrative processes, delegated authorities downward, and made progress toward implementing the Commerce Administrative Management System, which will greatly improve financial management and accountability.

**Converging satellites.** NOAA is working with the Department of Defense to merge civilian and defense weather satellites. NOAA and DOD recently agreed to defer the need for the first satellite in the system. A comprehensive program evaluation, which will include a thorough review of current cost estimates, program content, and acquisition status, will be conducted in the spring of 1997.

**Disestablishing the NOAA Corps.** The NOAA Commissioned Corps, which is a uniformed service, has been downsized significantly in the last two years, and is required to reduce to 299 officers in FY 1997. NOAA intends to disestablish the Corps, following a transition to a civilian work force. Legislation is required to effect this change, which will involve costs that currently are being developed. NPR savings are estimated at \$25 million by 1999 from continued streamlining efforts. The FY 1998 budget includes an increase of \$6 million over 1997 to fund costs associated with the proposal to disestablish the NOAA Corps.

**Closing NWS field offices.** The NWS expects the Secretary of Commerce to be in a position to certify “no degradation of service” in order to automate and close over 100 weather service offices in FY 1997, under the current provisions of P.L. 102-567, the law governing weather service modernization. In order to expedite closure of about 200 NWS field offices, NOAA continues to propose amending P.L. 102-567. The proposed amendments will streamline certification provisions related to the restructuring and closure of weather service offices without compromising the quality of the review. The FY 1998 budget includes \$3.1 million in savings from streamlining activities.

**Privatizing specialized weather services.** NOAA continues to encourage development of the private weather industry. NOAA has privatized specialized weather services including agriculture, fruit frost, fire weather for non-Federal non-wildfire land management, and specialized event forecasts. The on-going NWS modernization, resulting in new and expanded data sets, will support continuing opportunities for private companies to provide weather services.

**Expanding private sector ship support.** NOAA is expanding the use of private contractors and cooperative arrangements with universities for ship support, and collecting information to assess private sector interest, capability and costs for meeting requirements. NOAA has completed contracts for hydrographic surveys, and will continue this effort during FY 1997 with \$6 million in dedicated funding. The National Ocean Service plans to award contracts in

FY 1997 for surveys in the Gulf of Mexico to acquire hydrographic data for area approaches to Texas and Louisiana ports. These contracts should include a second year option. Additional smaller contracts are also planned. NOAA is also expanding the use of private sector contractors for data compilation and management services to improve the capability to prepare survey data for application to nautical charts.

**Transforming seafood inspection.** NOAA expects to establish a seafood inspection Performance Based Organization (PBO) during 1997. After assessing initial performance, NOAA will propose legislation to provide any necessary statutory authorities and to permit the PBO to realize a broad range of benefits and operating efficiencies.

**Improving fisheries management.** In cooperation with the fishing industry, NOAA will implement access controls for 25 of 39 Fishery Management Plans by the end of FY 1997, and 27 of 39 by the end of FY 1998. Under new legislative authorities in the Magnuson-Stevens Act, NOAA will work with stakeholders to establish user fees for individual fishing quotas in certain Alaskan fisheries.

**Streamlining regulations.** NOAA is revising and streamlining 70 parts of the Code of Federal Regulations and eliminating 400 pages. This will reduce the reporting burden on the public, and reduce by 27 percent the reporting burden hours of the National Marine Fisheries Service.

### *Strategic Planning and the Government Performance and Results Act*

NOAA has institutionalized a strategic planning process that defines and validates its business activities, guides the development of implementation, operating and SES performance plans, and forms the basis for management decisions. The Strategic Plan provides the framework for articulating and organizing the agency's goals and work objectives. NOAA's goals for the future will enhance opportunities for our citizens, the health of the U.S. economy, the protection of our environment, and the sustainable use of our natural resources.

NOAA has made the Government Performance and Results Act (GPRA) operational following strong participation as a pilot agency. During the pilot period, NOAA was selected by the Office of Management and Budget as one of ten exemplars and was commended by GPRA review panel of the National Association of Public Administration (NAPA). Currently, NOAA is working with General Accounting Office to identify best practices for Federal agencies to follow, contributing to National Performance Review (NPR) performance measurement benchmarking studies, and assisting the Department of Commerce with developing a DOC Strategic Plan for submission to OMB by September, 1997. NOAA views the GPRA as a management tool to facilitate

decision-making. NOAA has integrated performance measures into its planning, budgeting, and management review cycles, and is designing a program evaluation process to measure agency-wide progress toward meeting goals.

### *Benefits of Partnerships*

NOAA builds partnerships with universities; international, federal, state and local entities; industries and businesses; and groups and individuals to address common needs and leverage resources. For example, the Fishery Management Councils and the Interstate Marine Fishery Commissions are examples of innovative partnerships bringing resource managers and fishing interests to the same table to address concerns. International leadership and collaboration helps to ensure the conservation of living marine resources, especially straddling fish stocks and endangered marine species. NOAA continues to work with local communities to formulate and oversee policies and programs to address fishery resource disasters in the Pacific Northwest, the Northeast, and the Gulf of Mexico. Lastly, NOAA provides technical assistance and financial support for the development and implementation of state coastal zone management plans through a unique state-federal partnership with coastal states.

NOAA depends strongly on universities to help accomplish science objectives in its mission areas. NOAA and university scientists collaborate on severe weather, climate, and fisheries research via a network of Joint and Cooperative Institutes at universities. NOAA also funds academic researchers through competitive, peer-reviewed programs, including the Climate and Global Change Program, Coastal Ocean Program, the National Estuarine Research Reserve System, the National Sea Grant College Program, the Saltonstall-Kennedy grants program, and the Cooperative Program for Operational Meteorology Education and Training. NOAA has established a NOAA-University partnership to enhance collaboration with universities, and will host a series of workshops during 1997 with a broad range of both academic and other constituents to provide for constituent input and feedback into NOAA's strategic planning and budget formulation process.

Weather and climate services are provided to the public and industry through a unique partnership between the NWS and the private meteorological sector. The NWS provides forecasts and warnings for public safety, and the private sector promotes dissemination of forecasts and the tailoring of basic information for business uses. NOAA generally is seeking to reduce the costs of environmental data collection and to improve access to space-based and other environmental monitoring technologies by utilizing existing federal and international assets, and planning for the next generation of polar-orbiting satellites.



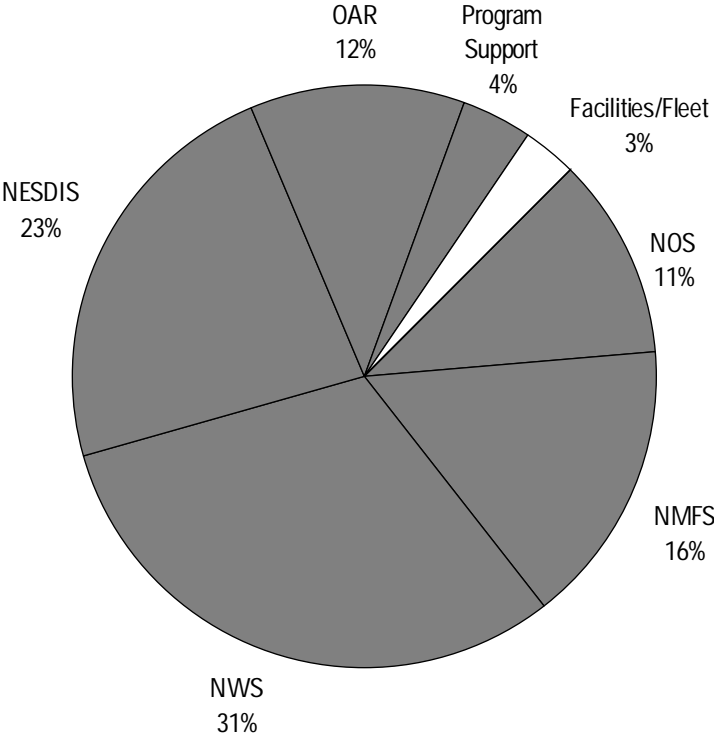






# OPERATIONS, RESEARCH & FACILITIES/CAPITAL ASSETS ACQUISITION

*FY 1998 Operations, Research and Facilities & Capital Assets Acquisition Budget Request*



**Total Operations, Research and Facilities/Capital Assets Acquisition**

**Requested: \$2,069,790,000**

NWS: National Weather Service  
NMFS: National Marine Fisheries Service  
NESDIS: National Environmental Satellite,  
Data & Information Service

OAR: Oceanic & Atmospheric Research  
NOS: National Ocean Service



# National Ocean Service

Total Request: \$224,836,000

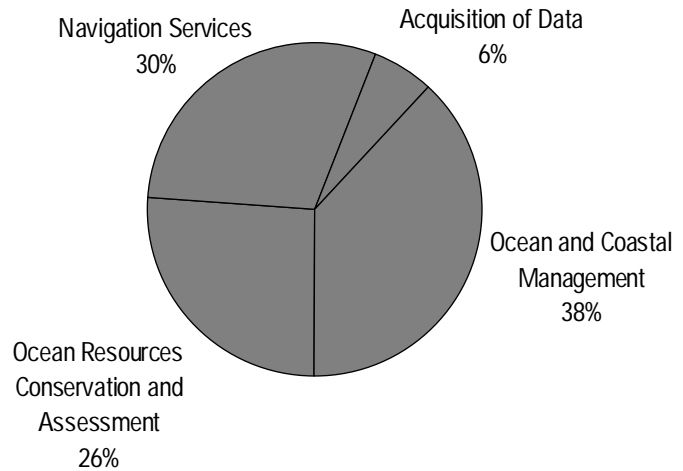
The National Ocean Service (NOS) is the primary Federal entity responsible for the observation, measurement, assessment and management of the Nation's coastal and ocean areas. NOS provides improvements in the quality, quantity, geographic distribution, and timeliness of ocean observations. Mapping, charting and geodetic activities produce marine, aeronautical and coastal data to increase the efficiency and safety of marine and air commerce and support engineering and scientific efforts. NOS also develops and manages marine sanctuaries and, in partnership with the states, estuarine reserves of national significance. Understanding of the coastal environment is enhanced through coastal ocean science activities which support science and management resource programs and the Coastal Zone Management program. Funding for NOAA's Coastal Ocean Program, which conducts research across NOAA's coastal missions, is included in the NOS budget activity.

For FY 1998, the National Ocean Service requests \$224.8 million. This is a net increase of \$18.9 million increase over the FY 1997 currently available. This change consists of program increases of \$45.2 million and program decreases of \$26.2 million.

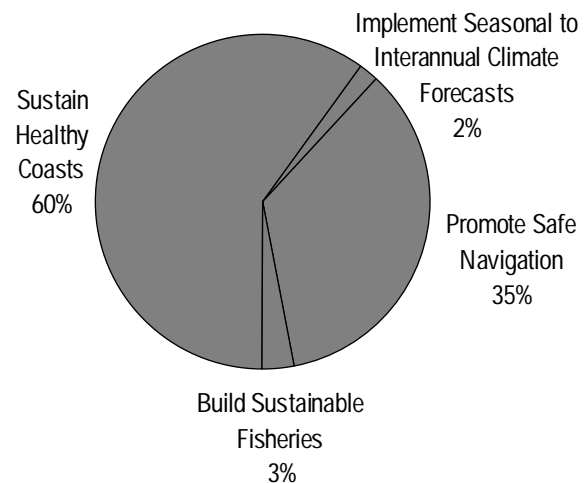
## Navigation Services

This subactivity funds production of nautical and aeronautical charts and related products to ensure the safety of marine and air transportation, while improving the economic efficiency and completeness of U.S. commerce, through the provision of a variety of digital and traditional data products and services which include such things as paper charts, electronic charts, and tide and current predictions. It also maintains the National Geodetic Reference Systems for accurate geographic positions, elevations and gravity values and their variation with time for national defense and space activities, mapping and charting, infrastructure maintenance, public works, land information systems, and Earth science investigations.

Activity Based (ORF)



Goal Based (Strategic Plan Structure)



The NOAA budget proposes to transfer \$14.5 million to the Federal Aviation Administration (FAA) to support the aeronautical charting program from NOS to the FAA. The transfer will take place in two stages. In FY 1998, the funds will be transferred but the program's employees will remain in NOAA and will receive reimbursable funds from the FAA to operate the program. In FY 1999, the employees will also be transferred and NOAA's involvement with the program will end.

An increase of \$12.6 million is requested to replace funds that the aeronautical and nautical charting programs formerly received from the Defense Mapping Agency. Of this amount, \$4.0 million, is included in the transfer of the aeronautical charting program to the FAA.

A proposed decrease of \$1.5 million is the result of the decision to terminate funding for the National Coastal Data Center.

A decrease of \$1.0 million is proposed in the geodesy program to reduce the number of GPS Continuously Reference Stations and to eliminate funding for the South Carolina demonstration project to modernize the national height system.

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

This subactivity conducts monitoring, assessment, oil and hazardous materials spill response, and directed research programs to provide comprehensive scientific information for decisions about the protection and sustainable use of resources and to minimize damages to natural resources in the nation's coastal areas, estuaries, and oceans, including the Great Lakes. These programs monitor the status and trends of environmental quality in U.S. coastal areas, assess the biological consequences of pollutants in coastal ecosystems, synthesize environmental data to identify and evaluate strategies for managing coastal and ocean resources, conduct natural resource damage assessments to support recovery of funds for restoration, and coordinate spill response activities and planning efforts to minimize the environmental effects of oil and hazardous materials spills and hazardous waste sites in coastal areas.

An increase of \$3.9 million is requested for the Administration's Clean Water Initiative under the Community-Right-to-Know Project on toxic contamination and water quality. Within this increase, \$2.9 million will be used to establish a national coastal watershed monitoring network of reference sites to measure, analyze, and report comprehensive information on environmental quality, especially toxic contamination, in estuarine and coastal waters. An additional \$1.0 million will be used to conduct natural resource assessment and remediation activities to clean up hazardous waste sites that affect NOAA trust resources throughout the Nation.

An increase of \$1.9 million is requested to fund NOS's portion of the Administration's South Florida Interagency Ecosystem Restoration Initiative. The

additional funds will allow NOS to fully implement an integrated ecosystem monitoring program in South Florida, particularly in the coastal marine areas encompassing Florida Bay and the Florida Keys National Marine Sanctuary.

An increase of \$0.8 million is requested for the Damage Assessment and Restoration Program (DARP). This increase will enable NOAA to fulfill its legislative mandates and public trusteeship responsibilities for coastal and marine resources. The additional funds are required for case-specific studies to support NOAA litigation and for development of new methods to more efficiently and effectively value coastal and estuarine habitats.

A decrease of \$2.7 million is proposed for research activities on the monitoring, management, and prevention of contamination in the Great Bay National Estuarine Research Reserve.

A decrease of \$2.0 million is proposed for coastal hazards research and environmental monitoring at the NOAA Coastal Services Center.

An increase of \$0.3 million is proposed for Ocean Services for the acquisition of sea surface-temperature and ocean-temperature profiles from specially instrumented commercial vessels and for storage and archiving the acquired data.

A decrease of \$0.3 million is proposed for transfer from the Damage Assessment Fund due to reduced funding available.

NOAA requests \$1.9 million, an increase of \$0.6 million for the Coastal Ocean Program (COP) to enhance COP's participation in the Interagency South Florida Ecosystem Restoration Initiative. Funds totaling \$0.4 million, a decrease of \$0.6 million, are also requested to reduce COP's participation in the National Harmful Algal Bloom program. This subactivity includes continued support for COP's academic and other NOAA partnerships to improve predictions in the areas of fisheries productivity, marine habitat, and coastal flooding. Highlights include a joint Global Ocean Ecosystem Dynamics (GLOBEC) venture between the National Science Foundation (NSF) and NOAA, which will study salmon fisheries and northeast Pacific ecosystem responses to climate variability; and an interagency national research program on the Ecology and Oceanography of Harmful Algal Blooms (ECOHAB).

## **Ocean and Coastal Management**

This subactivity supports the coastal states and territories to implement a Federal partnership of programs that promote rational use of the Nation's coastal zone, and designates and manages unique and nationally significant marine and estuarine areas.

An increase of \$18.0 million is requested for the Administration Clean Water Initiative's toxic contamination reduction project. The result will be improved coastal water quality obtained by reducing toxic inflows and sources through

\$6.0 million of Coastal Zone Management (CZM) Section 306/309 matching grants that strengthen the management capabilities of 33 Federally-approved CZM programs, including those in the Great Lakes; and \$12.0 million of CZM Section 310 funds that provide CZM Program technical assistance and demonstration projects.

An increase of \$1.5 million is requested for the state grants program to partially offset the cost of implementing two new coastal programs in Minnesota and Georgia.

An increase of \$1.5 million is requested for the National Marine Sanctuaries to partially offset increases in basic operational costs at all sites, provide limited enhanced operations for sites below minimal operational levels, and provide some support for implementing final management plans for the Hawaiian Islands Humpback Whale and Florida Keys sanctuaries.

An increase of \$1.0 million is requested to fund the Section 6217 Non-point Pollution Control Program. This funding will assist coastal states in meeting conditions associated with the Federal approval of their coastal non-point programs.

NOAA is requesting an increase in ORF of \$3.0 million for the National Estuarine Research Reserve System (NERRS). In FY 1997 this amount was made available within the Coastal Zone Management Fund. Funding is no longer available for NERRS from the rapidly depleting Coastal Zone Management Fund. The NERRS program level would remain unchanged at its FY 1997 level of \$4.3 million.

### **Acquisition of Data**

A decrease of \$3.7 million is requested for Acquisition of Data which will result in reductions in base support of operations (shore based and days-at-sea) and the operational funding for the NOAA ship *Ronald H. Brown* which was appropriated under the National Ocean Service in FY 1997, but actually supports oceanic and atmospheric research operations. Funds are requested for the operation of the *Ronald H. Brown* within the Oceanic and Atmospheric Research activity.



| <i>Dollars in Thousands</i>                              | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |                |
|--|---------------------------|----------------|--------------------|----------------|-------------------|----------------|
|  | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount         |
| <b>ACTIVITY REQUEST</b>                                  |                           |                |                    |                |                   |                |
| <b>National Ocean Service</b>                            |                           |                |                    |                |                   |                |
| <b>Navigation Services</b>                               |                           |                |                    |                |                   |                |
| Mapping and Charting                                     | 298                       | 38,000         | 238                | 36,100         | (60)              | (1,900)        |
| Geodesy  | 197                       | 20,167         | 197                | 19,159         | 0                 | (1,008)        |
| Tide and Current Data                                    | 141                       | 12,500         | 141                | 11,000         | 0                 | (1,500)        |
| <b>Total Navigation Services</b>                         | <b>636</b>                | <b>70,667</b>  | <b>576</b>         | <b>66,259</b>  | <b>(60)</b>       | <b>(4,408)</b> |
| <b>Ocean Resources Conservation and Assessment</b>       |                           |                |                    |                |                   |                |
| Estuarine and Coastal Assessment                         | 255                       | 42,674         | 255                | 44,599         | 0                 | 1,925          |
| Coastal Ocean Science (COP)                              | 21                        | 15,200         | 21                 | 15,200         | 0                 | 0              |
| <b>Total Ocean Resources Conservation and Assessment</b> | <b>276</b>                | <b>57,874</b>  | <b>276</b>         | <b>59,799</b>  | <b>0</b>          | <b>1,925</b>   |
| <b>Ocean and Coastal Management</b>                      |                           |                |                    |                |                   |                |
| Coastal Management                                       | 0                         | 47,500         | 0                  | 71,032         | 0                 | 23,532         |
| Ocean Management   | 97                        | 11,685         | 97                 | 13,200         | 0                 | 1,515          |
| <b>Total Ocean and Coastal Management</b>                | <b>97</b>                 | <b>59,185</b>  | <b>97</b>          | <b>84,232</b>  | <b>0</b>          | <b>25,047</b>  |
| <b>Acquisition of Data</b>                               | <b>230</b>                | <b>18,200</b>  | <b>230</b>         | <b>14,546</b>  | <b>0</b>          | <b>(3,654)</b> |
| <b>Total National Ocean Service</b>                      | <b>1,239</b>              | <b>205,926</b> | <b>1,179</b>       | <b>224,836</b> | <b>(60)</b>       | <b>18,910</b>  |

| <i>Dollars in Thousands</i>                        | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |               |
|--|---------------------------|----------------|--------------------|----------------|-------------------|---------------|
|  | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount        |
| <b>GOAL BASED</b>                                  |                           |                |                    |                |                   |               |
| <b>National Ocean Service</b>                      |                           |                |                    |                |                   |               |
| Advance Short-Term Warning and Forecast Services   |                           | 150            |                    | 150            | 0                 | 0             |
| Implement Seasonal to Interannual Climate Forecast |                           | 2,500          |                    | 2,800          | 0                 | 300           |
| Promote Safe Navigation                            | 866                       | 86,380         | 806                | 78,449         | (60)              | (7,931)       |
| Build Sustainable Fisheries                        | 14                        | 7,350          | 14                 | 7,350          | 0                 | 0             |
| Sustain Healthy Coasts                             | 359                       | 109,546        | 359                | 136,087        | 0                 | 26,541        |
| <b>Total National Ocean Service</b>                | <b>1,239</b>              | <b>205,926</b> | <b>1,179</b>       | <b>224,836</b> | <b>(60)</b>       | <b>18,910</b> |

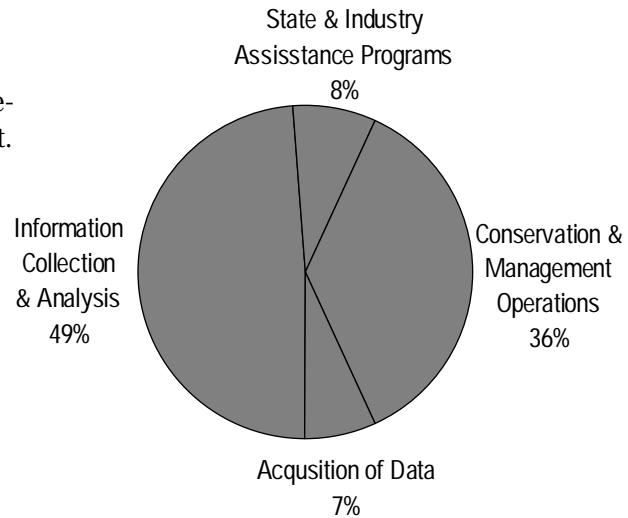


# National Marine Fisheries Service

Total Request: \$338,264,000

The mission of the National Marine Fisheries Service (NMFS) is stewardship of living marine resources for the benefit of the Nation through science-based conservation and management and promotion of the health of their environment. The agency's authority to carry out its mission comes primarily from three major pieces of legislation: the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA); the Marine Mammal Protection Act (MMPA); and the Endangered Species Act (ESA). The science, research and data collection activities conducted by NMFS form the basis for conservation and management decisions made under these legislative authorities. Other pieces of legislation such as the Clean Water Act, the Lacey Act and the Agriculture Marketing Act provide authority for habitat protection, enforcement and seafood safety activities.

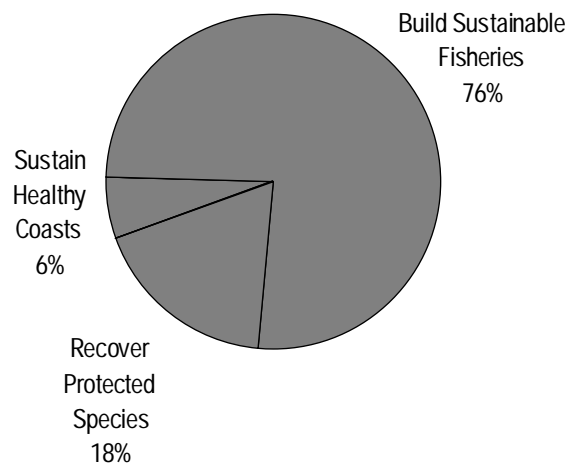
Activity Based (ORF)



The FY 1998 Budget request includes increases to meet the additional workload required within the recently reauthorized Magnuson-Stevens Fishery Conservation and Management Act and additional consultations, listing actions and management activities for West coast salmon and steelhead to meet the responsibilities of the Endangered Species Act. The goals and objectives of the NMFS mission are embodied in three of the seven goals of NOAA's Strategic Plan: Build Sustainable Fisheries; Recover Protected Species; and Sustain Healthy Coasts (habitat protection).

For FY 1998, the National Marine Fisheries Service (NMFS) requests \$338.3 million. This is a net increase of \$16.6 million over the FY 1997 Currently Available, which consists of program increases of \$24.7 million to implement new provisions of the recently reauthorized Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), and to address the increased workload associated with additional Endangered Species Act listings and consultations for West Coast salmon and steelhead. This is offset by program decreases of \$8.2 million from activities that were funded in excess of the FY 1997 request. Decreases are requested in order to allow support for other NMFS initiatives in a constrained budget.

Goal Based (Strategic Plan Structure)



## **Information Collection and Analysis**

The goal of this budget subactivity is to provide accurate and timely analyses on the biological, ecological, economic, and social aspects of the Nation's use of its living marine resources in support of Administration goals to Build Sustainable Fisheries, Recover Protected Species, and Sustain Healthy Coasts. In FY 1998, a net decrease of \$0.3 million is requested for this subactivity; which consists of \$2.4 million of program increases, offset by \$2.7 million of program decreases.

An increase of \$1.7 million is requested for the Resource Information line item. This increase is requested to develop models and apply strategies for bycatch reduction consistent with provisions of the Magnuson-Stevens Act. Six decreases totaling \$2.4 million are proposed for activities (Chesapeake Bay Studies, Right Whale Research, Stellar Sea Lion Recovery Plans, Bluefish/Striped Bass, Gulf of Mexico Mariculture, and Hawaii Stock management Plan) that were funded in FY 1997 at levels above the FY 1997 request and cannot be maintained in the effort to support other NMFS initiatives.

A net increase of \$0.1 million is requested for the Fishery Industry Information line item. This includes a \$0.4 million increase for Fish Statistics. These funds will be used for annual collection and analysis of economic and social data on marine recreational fishing and commercial fisheries, and to provide information necessary for fisheries management decisions under the Magnuson-Stevens Act. A reduction of \$0.3 million is requested for recreational fishery harvest monitoring.

An increase of \$0.3 million is requested for Information Analysis and Dissemination to continue the development of improved stock assessment programs required to build sustainable fisheries. Timely, accurate stock assessment data is essential for optimum management of the resource.

## **Conservation and Management Operations**

This budget subactivity provides for the development and implementation of Fishery Management Plans (FMPs) under the Magnuson-Stevens Act, and for the management of protected species under the Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA). It also provides for the enforcement of laws and regulations under these and other statutes as well as for the protection of habitats. Funding for the eight Regional Fishery Management Councils is included in this subactivity, as is funding for Mitchell Act hatcheries along the Columbia River in the Pacific Northwest. Net increases totaling \$20.1 million are requested for the subactivity Conservation and Management Operations; which consists of \$22.1 million of program increases, offset by \$2.0 million of program decreases.

A net increase of \$8.9 million is requested for Fisheries Management Programs line item. Of this increase, \$8.8 million is requested to implement new requirements in the recently reauthorized Magnuson-Stevens Act. The Act contains

many new requirements including major revisions to all existing 39 Fishery Management Plans (3 new national standards, bycatch, overfishing, impact on fishing communities, economic and regulatory discards, data by fishing sector and other provisions), identification of and implementation of programs to conserve Essential Fish Habitat, completion of numerous reports and studies, including three National Academy of Science studies, establishment of several fisheries advisory panels, and promulgation of new regulations (\$7.3 million). Additional funding is also required by the eight Regional Fishery Management Councils associated with new requirements under Magnuson-Stevens Act including increased membership on two Councils (\$1.5 million).

An increase of \$1.7 million is required to cover the administrative costs of managing the portfolio of existing and future loan guarantees. These costs were paid in FY 1997 through the transfer of \$1.7 million from the Federal Ship Financing Fund (FSFF) to the ORF account, however in FY 1998 sufficient funds do not exist in the FSFF to continue this practice.

Three decreases totaling \$1.6 million are requested for Fisheries Management Programs for activities funded in FY 1997 above the FY 1997 request (Columbia River Hatcheries, International Fisheries Commissions, and Pacific Tuna Management). These activities are proposed for reduction in order to support other NMFS initiatives in a constrained budget.

A net increase of \$7.7 million is requested for Protected Species Management to develop and implement recovery and conservation plans for species currently listed as depleted, threatened, or endangered under the ESA and MMPA. This includes funds specifically to address the increased workload associated with harvest, hatcheries, habitat, and hydropower activities in response to the expected additional salmon and steelhead listings along the West Coast (\$6.7 million) from Los Angeles to the Canadian border. These listings will triple the land area impacted by ESA conservation activities. Funds are also required to develop and implement recovery and conservation plans for whales and sea turtles under the ESA, and for other requirements under the MMPA (\$1.4 million). A decrease of \$0.4 million is requested to end funding to the University of Alaska for fishery observer training.

An increase of \$1.8 million is requested for the Habitat Protection line item for the development of Habitat Conservation Plans (HCPs) and for the increase in FERC relicensing on the West Coast. The rapidly increasing number of HCPs represent an Administration effort to better integrate Federal conservation goals with the needs of private landowners. Several early successes have led to increasing interest in HCPs. Adequate habitat watershed planning and management are essential components of the overall recovery effort for salmon and steelhead species.

An increase of \$1.7 million is requested for Enforcement and Surveillance to

ensure adequate compliance under the Magnuson-Stevens Act, ESA, and MMPA and to fully implement the Voluntary Compliance Program.

### **State and Industry Assistance Programs**

This budget subactivity provides for product quality and safety research, grants to states under the Anadromous and Interjurisdictional Fisheries Acts, funding for the three Interstate Fisheries Commissions and the Atlantic Coastal Fisheries Act.

An increase of \$0.3 million is requested for the Anadromous Fishery Project (Striped Bass) in the Northeast. In FY 1997, this activity was funded within the Bluefish/Striped Bass activity in the Resource Information line item which is being eliminated in FY 1998.

Two decreases totaling \$1.8 million are requested for activities that were funded above the FY 1997 request and cannot be maintained in order to support other NMFS initiatives (Atlantic Coastal Fisheries Act and funding to the Oceanic Institute in Hawaii).

### **Acquisition of Data**

A decrease of \$1.7 million is requested for Acquisition of Data resulting in a reduction in base support of operations (shore based and days-at-sea).

| <i>Dollars in Thousands</i>                           | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |                |
|---|---------------------------|----------------|--------------------|----------------|-------------------|----------------|
|   | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount         |
| <b>ACTIVITY REQUEST</b>                               |                           |                |                    |                |                   |                |
| <b>National Marine Fisheries Service</b>              |                           |                |                    |                |                   |                |
| <b>Information Collection &amp; Analyses</b>          |                           |                |                    |                |                   |                |
| Resource Information                                  | 933                       | 116,233        | 933                | 115,540        | 0                 | (693)          |
| Fishery Industry Information                          | 146                       | 24,600         | 146                | 24,700         | 0                 | 100            |
| Information Analyses & Dissemination                  | 243                       | 24,900         | 243                | 25,200         | 0                 | 300            |
| <b>Total Information Collection &amp; Analyses</b>    | <b>1,322</b>              | <b>165,733</b> | <b>1,322</b>       | <b>165,440</b> | <b>0</b>          | <b>(293)</b>   |
| <b>Conservation &amp; Management Operations</b>       |                           |                |                    |                |                   |                |
| Fisheries Management Program                          | 193                       | 45,271         | 205                | 54,166         | 12                | 8,895          |
| Protected Species Management                          | 237                       | 32,370         | 282                | 40,078         | 45                | 7,708          |
| Habitat Conservation                                  | 116                       | 8,000          | 116                | 9,800          | 0                 | 1,800          |
| Enforcement & Surveillance                            | 171                       | 16,500         | 171                | 18,200         | 0                 | 1,700          |
| <b>Total Conservation &amp; Management Operations</b> | <b>717</b>                | <b>102,141</b> | <b>774</b>         | <b>122,244</b> | <b>57</b>         | <b>20,103</b>  |
| <b>State &amp; Industry Assistance Programs</b>       |                           |                |                    |                |                   |                |
| Interjurisdictional Fisheries Grants                  | 1                         | 9,708          | 1                  | 8,958          | 0                 | (750)          |
| Fisheries Development Program                         | 154                       | 17,274         | 154                | 16,524         | 0                 | (750)          |
| <b>Total State &amp; Industry Assistance Programs</b> | <b>155</b>                | <b>26,982</b>  | <b>155</b>         | <b>25,482</b>  | <b>0</b>          | <b>(1,500)</b> |
| <b>Acquisition of Data</b>                            | <b>332</b>                | <b>26,840</b>  | <b>332</b>         | <b>25,098</b>  | <b>0</b>          | <b>(1,742)</b> |
| <b>Total National Marine Fisheries Service</b>        | <b>2,526</b>              | <b>321,696</b> | <b>2,583</b>       | <b>338,264</b> | <b>57</b>         | <b>16,568</b>  |

| <i>Dollars in Thousands</i>                    | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |               |
|--|---------------------------|----------------|--------------------|----------------|-------------------|---------------|
|  | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount        |
| <b>GOAL BASED</b>                              |                           |                |                    |                |                   |               |
| <b>National Marine Fisheries Service</b>       |                           |                |                    |                |                   |               |
| Build Sustainable Fisheries                    | 1,942                     | 248,728        | 1,954              | 256,289        | 12                | 7,561         |
| Recover Protected Species                      | 365                       | 54,728         | 410                | 62,325         | 45                | 7,597         |
| Sustain Healthy Coasts                         | 219                       | 18,240         | 219                | 19,650         | 0                 | 1,410         |
| <b>Total National Marine Fisheries Service</b> | <b>2,526</b>              | <b>321,696</b> | <b>2,583</b>       | <b>338,264</b> | <b>57</b>         | <b>16,568</b> |





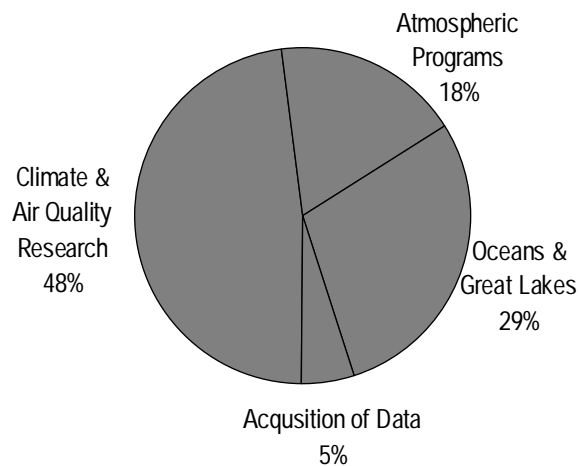
# Oceanic and Atmospheric Research

Total Request: \$248,050,000

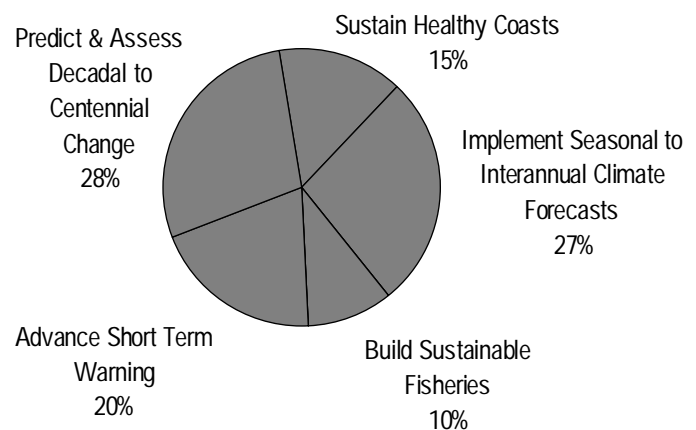
The mission of the Office of Oceanic and Atmospheric Research (OAR) is to provide critical environmental research and technology needed to improve NOAA services and enable the Nation to balance a growing economy with effective management and prediction of our environment and natural resources. These capabilities directly contribute to the achievement of six of NOAA's seven Strategic Plan goals; Advance Short-Term Warning and Forecast Services, Implement Seasonal to Inter-Annual Climate Forecasts, Predict and Assess Decadal to Centennial Change, Build Sustainable Fisheries, Recover Protected Species and Sustain Healthy Coasts. To accomplish these goals, OAR supports a world-class network of Federal scientists and laboratories (the Environmental Research Laboratories) and university/private-sector researchers through the National Sea Grant College Program, National Undersea Research Program, and Joint and Cooperative Institutes. Through these programs, OAR provides the research and technology development necessary to improve NOAA's weather and climate services, solar-terrestrial forecasts, and marine services. OAR's activities provide the scientific basis for national policy decisions in key environmental areas such as climate change, air quality, and stratospheric ozone depletion. In addition, OAR's research promotes economic growth through the development of marine biotechnology, aquaculture, and environmental observing technologies. OAR budget activity supports a number of NOAA-wide program endeavors, including the U.S. Weather Research Program, Health of the Atmosphere Program, Climate and Global Change Program, High Performance Computing and Communications (HPCC) and Global Learning and Observations to the Benefit the Environment (GLOBE), a program that increases our understanding of the Earth through a worldwide network of schools collecting environmental data.

For FY 1998, \$248.1 million is requested for Oceanic and Atmospheric Research. This is a net decrease of \$5.1 million below the FY 1997 Currently Available, which consists of program increases of \$10.6 million and program decreases of \$15.8 million.

Activity Based (ORF)



Goal Based (Strategic Plan Structure)



## Climate and Air Quality Research

OAR's climate and air-quality research improves our understanding of oceanic and atmospheric processes by monitoring and developing predictive capabilities of such processes. This improved understanding helps to provide sound scientific advice to managers of our Nation's oceanic and atmospheric resources.

NOAA is requesting an increase of \$4.9 million to ensure a stable funding base for the maintenance of the Tropical Ocean-Global Atmosphere (TOGA) observing system. This initiative funds *in-situ* components which already have been shown to provide essential measurements for skillful forecasts of the El Niño-Southern Oscillation (ENSO) phenomenon. These funds will transform a proven research-based system into an operational activity. This observing system collects data central to an ENSO forecast system. Accurate climate forecasts will enable farmers to plant and irrigate crops more intelligently, water managers to prepare for drought or flood conditions, and energy companies to prepare for expected demands (during heat waves or winter storms).

An increase of \$1.0 million is requested for the Health of the Atmosphere program. This increase will enable NOAA to contribute to the Nation's first scientific air quality assessment, which will provide decision-makers with the critical information needed to develop effective strategies for improving air quality and implementing the Clean Air Act and its amendments. Further, NOAA would be able to clarify options for addressing high ozone levels in a variety of rural areas in the Eastern U.S., where both crop and forest damage are critical issues and where high natural emissions must be accounted for in formulating options. NOAA would also be able to complete the early detection monitoring system, which will allow air quality researchers to document whether actions are having their intended consequences of achieving cleaner air. The return on this research investment will be high because economic losses from ozone pollution are estimated at \$3 to \$5 billion annually. Cost savings would accrue also by avoiding over-regulation or misregulation.

A \$1.0 million increase is proposed in NOAA funding for the GLOBE Program to support continued growth in the number of participating U.S. schools and the breadth of science data being collected for the international science community.

A \$2.0 million increase is requested for the Climate and Global Change Program to continue activities of the International Research Institute (IRI) and operational climate forecasts, and improve seasonal-to-interannual climate modeling and prediction over North America through process research programs. Funds will also augment research and support of the Global Ocean Atmosphere Land System Program (GOALS), the Global Energy and Water Cycle Experiment (GEWEX) Continental-scale International Project (GCIP). The increase will augment research in support of near-term policy decisions regarding climate-change issues. The issues include laboratory studies to measure stratospheric ozone-depleting reactions and field investigations to

characterize ozone losses and monitor the effects of substitutes. This research provides the scientific basis for policy choices associated with substitutes for chlorofluorocarbons (CFCs) and halon, as well as other ozone-depleting gases.

### **Atmospheric Programs**

These include research programs that will provide the Nation with more accurate forecasts and warnings of severe weather and geomagnetic storms that annually cause hundreds of deaths and billions of dollars worth of damage. Research is focused on developing better observing tools, understanding the processes that cause weather and solar-terrestrial phenomenon, and applying that information to improve warnings and forecasts. NOAA has led the effort to produce the interagency implementation plan for the U.S. Weather Research Program. No increases or decreases are proposed for this subactivity.

### **Ocean and Great Lakes Programs**

These programs represent NOAA's efforts to better understand and predict changes in ocean and Great Lakes environments, ensure optimal use of those environments and their resources, and promote economic growth in marine industries. Research efforts help to establish a sound scientific basis for management decisions on development and use of coastal, estuarine, and Great Lakes resources. Research also seeks to understand and predict physical, biological, and chemical processes and their interaction with contaminants in the near-shore zone. In addition, these programs investigate the factors affecting the recruitment of young fish and shellfish into economically significant stocks, predict environmental conditions in the oceans and Great Lakes, and seek to understand the processes and significance of deep-sea venting to the global budgets of greenhouse gases. Included in the Marine Prediction Research line item, is support for VENTS, the broad-based program that studies chemical, biological and geological processes on the ocean floor.

Marine Prediction Research has \$3.5 million in proposed program terminations for lower priority programs such as: Arctic Research; Tsunami Hazard Mitigation; and the Lake Champlain Study. The Sea Grant College Program has \$4.1 million in proposed terminations for the National Coastal Resources and Development Institute, funding for oyster disease research and in zebra mussel research. Finally, a decrease of \$6.6 million is proposed for the National Undersea Research Program. The Administration supports the NURP program at the \$5.4 million level, which will allow for a streamlined, yet nationally competitive research program

### **Acquisition of Data**

NOAA is requesting a net increase of \$0.2 million for this subactivity in FY 1998. An increase is requested for the operation of the NOAA ship *Ronald H. Brown*. In FY 1997, funds were appropriated under the National Ocean Service, but actually supports oceanic and atmospheric research operations. The decrease

is requested which will result in reductions in base support of operations (shore based and days-at-sea).

| <i>Dollars in Thousands</i>                   | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |                 |
|---|---------------------------|----------------|--------------------|----------------|-------------------|-----------------|
|   | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount          |
| <b>ACTIVITY REQUEST</b>                       |                           |                |                    |                |                   |                 |
| <b>Oceanic and Atmospheric Research</b>       |                           |                |                    |                |                   |                 |
| <b>Climate and Air Quality Research</b>       |                           |                |                    |                |                   |                 |
| Interannual & Seasonal Climate Research       | 21                        | 68,000         | 21                 | 12,900         | 0                 | (55,100)        |
| Long-Term Climate & Air Quality Research      | 217                       | 35,872         | 217                | 36,902         | 0                 | 1,030           |
| GLOBE   |                           | 6,000          |                    | 7,000          | 0                 | 1,000           |
| Climate and Global Change                     | 123                       | [60,000]       | 123                | 62,000         | 0                 | 62,000          |
| <b>Total Climate and Air Quality Research</b> | <b>361</b>                | <b>109,872</b> | <b>361</b>         | <b>118,802</b> | <b>0</b>          | <b>8,930</b>    |
| <b>Atmospheric Programs</b>                   |                           |                |                    |                |                   |                 |
| Weather Research                              | 228                       | 37,963         | 228                | 37,963         | 0                 | 0               |
| Solar-Terrestrial Services and Research       | 65                        | 5,493          | 65                 | 5,493          | 0                 | 0               |
| <b>Total Atmospheric Programs</b>             | <b>293</b>                | <b>43,456</b>  | <b>293</b>         | <b>43,456</b>  | <b>0</b>          | <b>0</b>        |
| <b>Ocean and Great Lakes Programs</b>         |                           |                |                    |                |                   |                 |
| Marine Prediction Research                    | 135                       | 20,851         | 135                | 17,326         | 0                 | (3,525)         |
| Sea Grant                                     | 22                        | 54,300         | 22                 | 50,182         | 0                 | (4,118)         |
| Undersea Research Program                     | 8                         | 12,000         | 8                  | 5,400          | 0                 | (6,600)         |
| <b>Total Ocean and Great Lakes Programs</b>   | <b>165</b>                | <b>87,151</b>  | <b>165</b>         | <b>72,908</b>  | <b>0</b>          | <b>(14,243)</b> |
| Acquisition of Data                           | 127                       | 12,690         | 127                | 12,884         | 0                 | 194             |
| <b>Total Oceanic and Atmospheric Research</b> | <b>946</b>                | <b>253,169</b> | <b>946</b>         | <b>248,050</b> | <b>0</b>          | <b>(5,119)</b>  |

| <i>Dollars in Thousands</i>                        | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |                |
|--|---------------------------|----------------|--------------------|----------------|-------------------|----------------|
|  | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount         |
| <b>GOAL BASED</b>                                  |                           |                |                    |                |                   |                |
| <b>Oceanic and Atmospheric Research</b>            |                           |                |                    |                |                   |                |
| Advance Short-Term Warning and Forecast Services   | 296                       | 51,954         | 296                | 49,579         | 0                 | (2,375)        |
| Implement Seasonal to Interannual Climate Forecast | 289                       | 60,609         | 289                | 66,776         | 0                 | 6,167          |
| Predict and Assess Decadal-to-Centennial Change    | 307                       | 67,394         | 307                | 69,788         | 0                 | 2,394          |
| Promote Safe Navigation                            |                           | 389            |                    | 389            | 0                 | 0              |
| Build Sustainable Fisheries                        | 10                        | 27,682         | 10                 | 23,498         | 0                 | (4,184)        |
| Recover Protected Species                          |                           | 340            |                    | 340            | 0                 | 0              |
| Sustain Healthy Coasts                             | 44                        | 44,801         | 44                 | 37,680         | 0                 | (7,121)        |
| <b>Total Oceanic and Atmospheric Research</b>      | <b>946</b>                | <b>253,169</b> | <b>946</b>         | <b>248,050</b> | <b>0</b>          | <b>(5,119)</b> |



# National Weather Service

Total Request: \$642,454,000

**\$503,763,000: Operations, Research and Facilities**

**\$138,691,000: Capital Assets Acquisition Account**

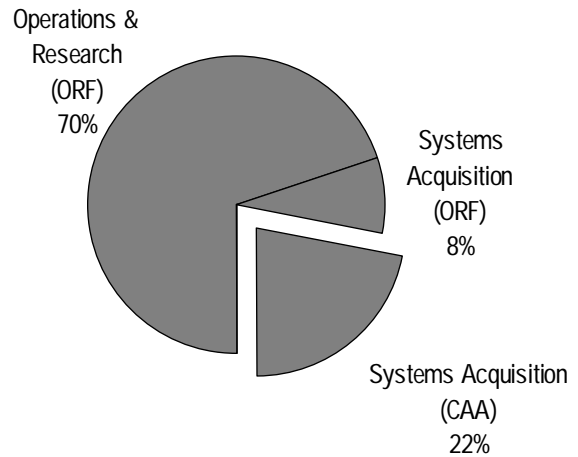
In FY 1998, NOAA is proposing to establish a Capital Assets Acquisition Account. Portions of this activity will be requested in that account. The following narrative describes the total activities of the National Weather Service (NWS) and does not distinguish between appropriation accounts. The detailed narrative has been divided to show the ORF and Capital Assets Acquisition subsections.

NWS provides weather and flood warnings, public forecasts, and severe weather advisories for all of the United States, the territories, adjacent waters and ocean areas primarily for the protection of life and property. Weather services are provided by a nationwide network of offices that collect data, utilize guidance products centrally prepared through the National Centers for Environmental Prediction (NCEP), prepare warnings and forecasts, and disseminate the information to the public. NWS modernization activities continue to apply the latest advances in science and technology to operational forecasting, and replace obsolete equipment. The NWS contributes to the achievement of three of NOAA's Strategic Plan goals; Advance Short-Term Warning and Forecast Services, Implement Seasonal to Interannual Climate Forecasts, and Predict and Assess Decadal to Centennial Change.

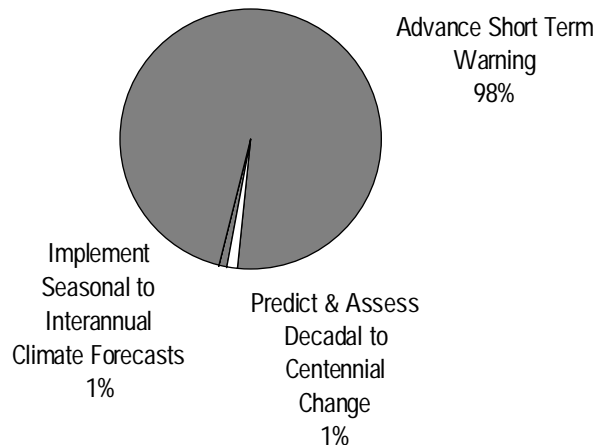
For FY 1998, the National Weather Service (NWS) requests \$642.5 million. This is a net decrease of \$10.0 million for Operations and Research and an increase of \$14.4 million for Systems Acquisition. These changes have been calculated from the FY 1997 Currently Available. Of the amount cited above, \$138.7 million are included in the Capital Assets Acquisition Account.

In response to decreases to absorptions in the NWS base operating budget over the past three years and recent Congressional direction, the NWS is finalizing plans to accelerate reductions in headquarters staffing levels and centrally provided support operations within the National Capitol Area. Beginning in FY 1997, the NWS is re-engineering certain aspects of its current program

**Activity Based  
(Appropriations Structure)**



**Goal Based  
(Strategic Plan Structure)**



operations in order to function within a more restrictive budget environment. The savings both in terms of FTE and dollars as a result of the above FY 1997 actions have been taken into account in the FY 1998 base.

### **Operations and Research**

A net decrease of \$10.0 million is requested to maintain NWS operations (+\$10 million) and continue planned streamlining activities under the Modernization and Associated Restructuring Demonstration and Implementation of the (MARDI) program (-\$20.8 million).

An increase of \$10.8 million is requested for base operations of the NWS. This funding is requested in order to maintain the NWS operational infrastructure and to ensure the provision of basic weather warning and forecast services to the public. The base restoration is necessary to offset mandatory cost increases and the temporary cost saving actions taken in FY 1997 to support a minimally acceptable level of weather services. This restoration is also needed to restore proposed savings from streamlining the certification provisions of P.L. 102-657 that were enacted in FY 1997. No funds provided in this request will be used to restore or alter any of the planned permanent headquarters or central support reductions.

A decrease of \$17.8 million is requested for the MARDI program in FY 1998 reflecting the continuing downsizing of NWS field operations and staff and the removal of the one-time contract cost for the NOAA Weather Radio Console Replacement System. The request also includes funding for equipment and operational costs associated with mitigation activities recommended in the Secretary's Team Report on NEXRAD Coverage and Associated Degradation of Weather Services at 32 Areas of Concern.

The decrease in the MARDI program identified above, also includes \$3.0 million in savings related to streamlining procedures required under the Weather Service Modernization Act (P.L.102-567). Specifically, the NWS proposes to streamline the current certification process related to consolidating, automating and closing weather service offices. This proposed amendment is being transmitted as part of the President's Budget.

A decrease of \$0.6 million is requested in the radiosonde replacement program to reflect the decision to suspend additional new investment in this project until the NOAA finalizes its plan for a future composite observation system. A decrease of \$0.4 million is requested for the Susquehanna River Basin Flood Warning System to reflect the on-going needs of the program.

A decrease of \$2.0 million is requested to reflect the privatization of the Regional Climate Center Program (RCCs). The RCCs provide specific regional climate information that can more appropriately be provided by non-Federal sources.



### **Systems Acquisition [Operations, Research & Facilities Account]**

In FY 1998, this subactivity provides for the continued operation and maintenance of the following systems: Next Generation Weather Radar (NEXRAD), Automated Surface Observing System (ASOS), and the Upgrade of the Central Computing Facility. Acquisition costs for these systems are requested in the Capital Assets Acquisition account.

A total of \$39.6 million is requested in ORF to operate and maintain the NWS network of 123 NEXRAD. The total NEXRAD program budget of \$51.0 million represents a decrease of \$2.2 million from the levels provided in FY 1997 to reflect the completion of the acquisition program.

A total of \$5.3 million is requested in ORF to operate and maintain the NWS network of 320 ASOS units. The total ASOS program budget of \$9.8 million represents a \$0.2 million reduction from the FY 1997 to reflect the completion of the acquisition program.

NOAA requests a total of \$8.0 million in ORF for the Central Computer Facility upgrade budget to reflect the continuing lease and maintenance of the Cray C-90 supercomputer. The total Central Computer Facility program budget of \$13.9 million represents a \$0.1 million reduction from levels provided in FY 1997.

### **Systems Acquisition [Capital Assets Acquisition Account]**

This account provides funding for the activities associated with multi-year procurement of the major systems supporting the NWS. Currently these systems are NEXRAD, ASOS, the Advanced Weather Interactive Processing System (AWIPS), and the Upgrade of the Central Computer Facility. The non-capital assets acquisition costs for these systems are contained in the ORF account under the Systems Acquisition subactivity.

A total of \$11.4 million is requested in this account to reflect remaining system acquisition and to support continued product improvement. The total NEXRAD program budget is \$51.0 million.

A total of \$4.5 million is requested in this account to support continued planned product improvements to ASOS. The total ASOS program budget is \$9.8 million.

NOAA requests a total of \$116.9 million in FY 1998 for the AWIPS program. This represents an increase of \$16.9 million over the amounts provided in FY 1997 in the ORF account for this program. These funds will allow for continued critical software development activities and to proceed with nationwide deployment of the AWIPS system.

A total of \$5.9 million is requested in this account for the Upgrade of the Central Computer Facility to provide for payment toward the Cray J-916 systems buyout and to complete the NWS telecommunications gateway upgrade.

(For more details on these projects, refer to multi-year table for Capital Assets Acquisition on page 14 and the Bridge of Changes From FY 1997 to FY 1998 in the Appendix.)

| <i>Dollars in Thousands</i>   | Current Avail.<br>FY 1997 |                  | FY 1998 Pres. Req. |                  | Increase/Decrease |                   |
|---|---------------------------|------------------|--------------------|------------------|-------------------|-------------------|
|   | FTE                       | Amount           | FTE                | Amount           | FTE               | Amount            |
| <b>ACTIVITY REQUEST</b>   |                           |                  |                    |                  |                   |                   |
| <b>National Weather Service</b>                                     |                           |                  |                    |                  |                   |                   |
| <b>Operations and Research</b>                                      |                           |                  |                    |                  |                   |                   |
| Local Warnings and Forecasts  | 4,469                     | 430,096          | 4,210              | 418,799          | (259)             | (11,297)          |
| Central Forecast Guidance   | 266                       | 28,700           | 266                | 29,543           | 0                 | 843               |
| Atmospheric and Hydrological Research                               | 45                        | 2,000            | 45                 | 2,489            | 0                 | 489               |
| <b>Total Operations and Research</b>                                | <b>4,780</b>              | <b>460,796</b>   | <b>4,521</b>       | <b>450,831</b>   | <b>(259)</b>      | <b>(9,965)</b>    |
| <b>Systems Acquisition,<br/>Public Warning and Forecast Systems</b> | 419                       | 177,201          | 373                | 191,623          | (46)              | 14,422            |
| <i>[Included in ORF]</i>  | <i>[419]</i>              | <i>[177,201]</i> | <i>[179]</i>       | <i>[52,932]</i>  | <i>[-240]</i>     | <i>[-124,269]</i> |
| <i>[Included in CAA]</i>  |                           |                  | <i>[194]</i>       | <i>[138,691]</i> | <i>[+194]</i>     | <i>[+138,691]</i> |
| <b>Total National Weather Service</b>                               | <b>5,199</b>              | <b>637,997</b>   | <b>4,894</b>       | <b>642,454</b>   | <b>(305)</b>      | <b>4,457</b>      |
| <i>Included in ORF</i>  | <i>[5,199]</i>            | <i>[637,997]</i> | <i>[4,700]</i>     | <i>[503,763]</i> | <i>[-499]</i>     | <i>[-134,234]</i> |
| <i>Included in CAA</i>  |                           |                  | <i>[194]</i>       | <i>[138,769]</i> | <i>[+194]</i>     | <i>[138,691]</i>  |

| <i>Dollars in Thousands</i>                        | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |              |
|--|---------------------------|----------------|--------------------|----------------|-------------------|--------------|
|  | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount       |
| <b>GOAL BASED</b>                                  |                           |                |                    |                |                   |              |
| <b>National Weather Service</b>                    |                           |                |                    |                |                   |              |
| Advance Short-Term Warning and Forecast Services   | 5,090                     | 623,244        | 4,785              | 629,577        | (305)             | 6,333        |
| Implement Seasonal to Interannual Climate Forecast | 54                        | 6,564          | 54                 | 4,688          | 0                 | (1,876)      |
| Predict and Assess Decadal-to-Centennial Change    | 55                        | 8,189          | 55                 | 8,169          | 0                 | 0            |
| <b>Total National Weather Service</b>              | <b>5,199</b>              | <b>637,997</b> | <b>4,894</b>       | <b>642,454</b> | <b>(305)</b>      | <b>4,457</b> |



# National Environmental Satellite, Data, and Information Service

Total Request: \$470,063,000

**\$149,485,000: Operations, Research and Facilities**

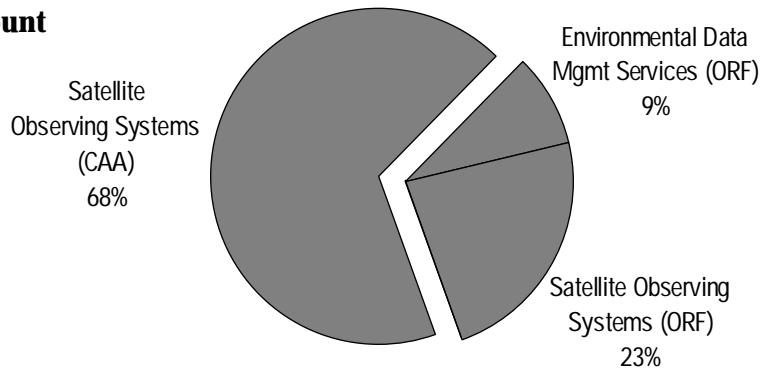
**\$320,578,000: Capital Assets Acquisition Account**

In FY 1998, NOAA is proposing to establish a Capital Assets Acquisition Account. Portions of this activity will be requested in that account. The following narrative describes the total activities of the National Environmental Satellite, Data, and Information Service (NESDIS) and does not distinguish between appropriation accounts. The detailed narrative has been divided to show the ORF and Capital Assets Acquisition subsections.

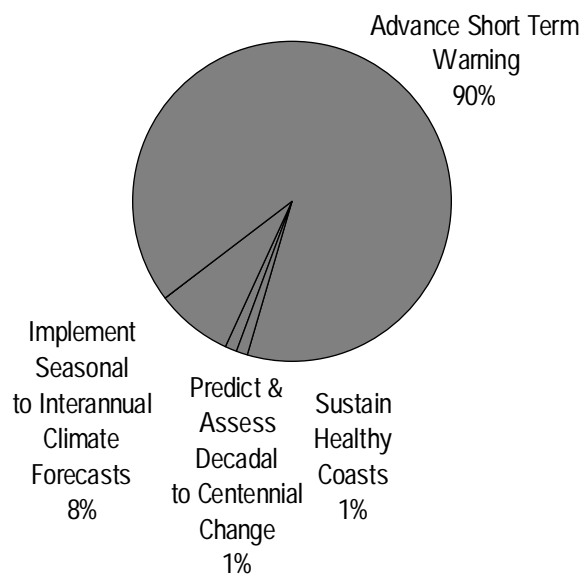
NESDIS provides for procurement, launch, and operation of the polar orbiting and geostationary environmental satellites, and management of NOAA's environmental data collections. NESDIS also acquires operational data from non-NOAA environmental satellites that include Department of Defense (DOD) and foreign satellite missions. The satellites provide meteorological data to the National Weather Service (NWS) and other environmental data users. Environmental data and information are collected from NOAA and other sources, disseminated in real time, and archived for future use, to meet the needs of users in commerce, industry, agriculture, science and engineering, the general public, and Federal, state and local agencies. NESDIS contributes to the achievement of five of NOAA's Strategic Plan Goals; Advance Short-Term Forecast and Warning Services, Implement Seasonal to Interannual Climate Forecasts, Predict and Assess Decadal to Centennial Change, Recover Protected Species, and Sustain Healthy Coasts.

For FY 1998, the National Environmental, Satellite, Data and Information Service (NESDIS) requests \$470.1 million. This reflects program increases of \$90.2 million and program decreases of \$67.8 million. All of these changes are calculated as changes from the FY 1997 currently available. Of

**Activity Based  
(Appropriations Structure)**



**Goal Based  
(Strategic Plan Structure)**



the amount cited above, \$320.6 million is included in the Capital Assets Acquisition Account.

### **Satellite Observing Systems—Operations, Research and Facilities Account**

This subactivity provides for the operation of current polar-orbiting and geostationary satellites, including the follow-on GOES series, the planning for the next series of polar satellites (the tri-agency convergence program), and the acquisition of satellite data from non-NOAA satellites. Operations for the LANDSAT-7 program are also included within this subactivity.

The Polar-Orbiting System request includes a increase of \$22.5 million. This increase reflects NOAA's share of the converged polar orbiting system which will succeed the current NOAA satellites and the Defense Meteorological Satellite Program (DMSP) of the Department of Defense after the current series of satellites have expended their useful lives. This program is a Tri-Agency (NOAA, DOD, and NASA) effort designed to integrate the polar orbiting satellite programs as recommended in the National Performance Review.

A decrease of \$0.2 million for Ocean Remote Sensing provides \$3.8 million to continue receiving and processing data from satellites operated by other countries. This data is made available to scientists, the maritime industry, and coastal zone managers.

A decrease of \$0.7 million provides \$50.3 million to maintain on-going satellite operations and product development and distribution.

### **Satellite Observing Systems—Capital Assets Acquisition Account**

This activity provides funding for the multi-year procurement of spacecraft, launches, and associated ground system changes for the polar orbiting and geostationary operational environmental satellites (POES and GOES).

The FY 1998 request for the Polar Orbiting System includes a decrease of \$64.4 million to cover the continuation of NOAA K through N prime spacecraft and additional instruments for the European satellites that will provide morning coverage starting in the early 2000's. This reduction reflects planned cost changes in the satellite procurement program and lower costs as a result of longer than expected mission duration.

The FY 1998 request for the Geostationary System is increased by \$66.2 million to cover the costs for the continuation of the GOES I through M spacecraft and instrument contracts and to begin procurement of up to four additional satellites, GOES N-Q, to assure continuity of two-spacecraft operations into the early 2000s.

## **Environmental Data Management Systems—Operations, Research and Facilities Account**

This budget subactivity provides \$43.8 million for environmental data and information products, services, and assessments in the atmospheric, marine, solid earth, and solar-terrestrial sciences to all of NOAA's programs. The FY 1998 request continues to provide global data and information in commerce, industry, agriculture, science and engineering, the general public, and Federal, state and local governments. Also included in this subactivity is NOAA's ongoing effort to rescue aging data and improve user access to all NOAA maintained environmental data. The FY 1998 decrease of \$1.0 million in this subactivity reflects savings anticipated from the implementation of the NOAA Virtual Data Center (NVDC) that will modernize existing data and storage systems and vastly improve, streamline and simplify customer access to environmental data. For customers and data users, NVDC will permit ease of access, through a single gateway, to data stored at the three data centers located at different geographical locations. Fees will be priced based on the cost of dissemination. Revenues generated will be used to offset the costs associated with data modernization.

Also included in this line item is increased funding of \$1.5 million for the operations and maintenance of the Satellite Active Archives (SAA).

(For more details on these projects, refer to multi-year table for Capital Assets Acquisition on page 14 and the Bridge of Changes From FY 1997 to FY 1998 in the Appendix.)

| <i>Dollars in Thousands</i>   | Current Avail.<br>FY 1997 |                  | FY 1998 Pres. Req. |                  | Increase/Decrease |                   |
|---|---------------------------|------------------|--------------------|------------------|-------------------|-------------------|
|   | FTE                       | Amount           | FTE                | Amount           | FTE               | Amount            |
| <b>ACTIVITY REQUEST</b>   |                           |                  |                    |                  |                   |                   |
| <b>NESDIS</b>   |                           |                  |                    |                  |                   |                   |
| <b>Satellite Observing Systems</b>  |                           |                  |                    |                  |                   |                   |
| Polar Spacecraft and Launching  | 13                        | 176,300          | 13                 | 134,408          | 0                 | (41,892)          |
| <i>[Included in ORF]</i>  | <i>[13]</i>               | <i>[176,300]</i> | <i>[0]</i>         | <i>[51,503]</i>  | <i>[-13]</i>      | <i>[-124,797]</i> |
| <i>[Included in CAA]</i>  |                           |                  | <i>[13]</i>        | <i>[82,900]</i>  | <i>[+13]</i>      | <i>[+82,905]</i>  |
| Geostationary Spacecraft and Launching  | 21                        | 171,480          | 21                 | 237,673          | 0                 | 66,193            |
| <i>[Included in ORF]</i>  | <i>[21]</i>               | <i>[171,480]</i> |                    |                  | <i>[-21]</i>      | <i>[-171,480]</i> |
| <i>[Included in CAA]</i>  |                           |                  | <i>[21]</i>        | <i>[237,673]</i> | <i>[+21]</i>      | <i>[+237,673]</i> |
| Ocean Remote Sensing (ORF)  |                           | 4,000            |                    | 3,800            |                   | (200)             |
| Environmental Observing Services (ORF)  | 507                       | 51,000           | 507                | 50,347           | 0                 | (653)             |
| <b>Total Satellite Observing Systems</b>  | <b>541</b>                | <b>402,780</b>   | <b>541</b>         | <b>426,228</b>   | <b>0</b>          | <b>23,448</b>     |
| <b>Environmental Data Management Systems, Data and information services (ORF)</b> |                           |                  |                    |                  |                   |                   |
| <b>Total National Environmental Satellite, Data and Information</b>               | <b>807</b>                | <b>447,582</b>   | <b>807</b>         | <b>470,063</b>   | <b>0</b>          | <b>22,481</b>     |
| <i>[Included in ORF]</i>  | <i>[807]</i>              | <i>[447,582]</i> | <i>[773]</i>       | <i>[149,485]</i> | <i>[-34]</i>      | <i>[-298,097]</i> |
| <i>[Included in CAA]</i>  |                           |                  | <i>[34]</i>        | <i>[320,578]</i> | <i>[+34]</i>      | <i>[+320,578]</i> |

| <i>Dollars in Thousands</i>   | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |               |
|---|---------------------------|----------------|--------------------|----------------|-------------------|---------------|
|   | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount        |
| <b>GOAL BASED</b>   |                           |                |                    |                |                   |               |
| <b>National Environmental Satellite, Data and Information Service</b> |                           |                |                    |                |                   |               |
| Advance Short-Term Warning and Forecast Services                      | 541                       | 399,865        | 541                | 423,513        | 0                 | 23,648        |
| Implement Seasonal to Interannual Climate Forecast                    | 266                       | 38,175         | 266                | 37,208         | 0                 | (967)         |
| Predict and Assess Decadal-to-Centennial Change                       |                           | 3,219          |                    | 3,219          | 0                 | 0             |
| Recover Protected Species   |                           | 1,202          |                    | 1,202          | 0                 | 0             |
| Sustain Healthy Coasts  |                           | 5,121          |                    | 4,921          | 0                 | (200)         |
| <b>Total National Environmental Satellite, Data and Information</b>   | <b>807</b>                | <b>447,582</b> | <b>807</b>         | <b>470,063</b> | <b>0</b>          | <b>22,481</b> |



# Program Support

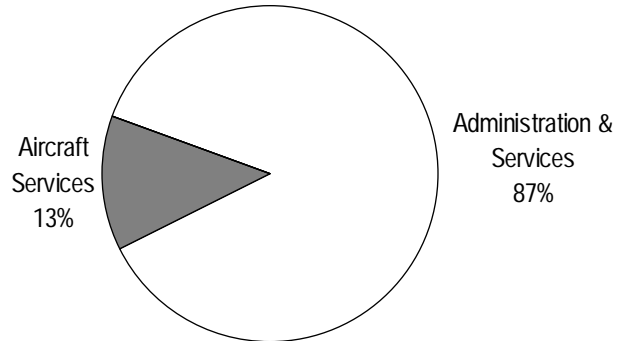
Total Request: \$77,158,000

For FY 1998, Program Support requests \$77.1 million. This reflects program increases of \$6.7 million, program decreases of \$1.3 million.

## Executive Direction and Administration

An increase of \$0.7 million is requested for NOAA's share of the Department's total shared CAMS cost. Also, \$1.0 million of funding will be redirected within the base for the CAMS project. CAMS is essential for NOAA to reduce and replace its labor intensive processes to meet streamlining targets, and achieve the integrated systems needed for an unqualified audited financial statement required under the Chief Financial Officers Act of 1990 (CFO). The funds will be used for the design, development, and implementation of the procurement and contracts modules. The core staff of the Systems Acquisition Office is included in this line item.

Activity Based  
(Appropriations Structure)



## Central Administrative Support

A decrease of \$1.2 million, an approximate five percent reduction from the FY 1997 Currently Available, is requested to meet the Administration's goal to balance the budget.

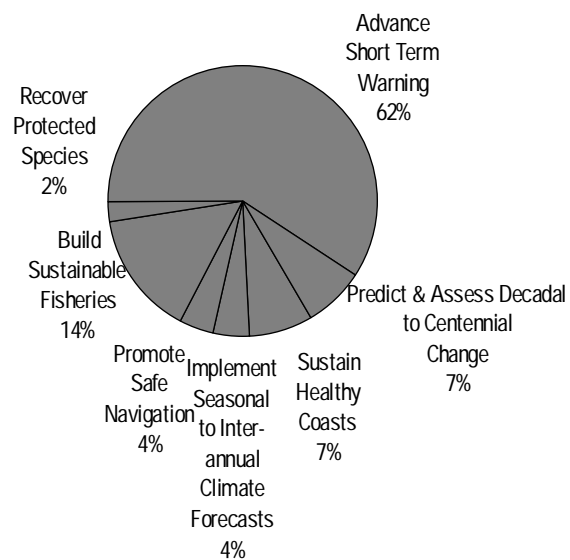
## Retired Pay/Benefits to Commissioned Officers

NOAA is requesting \$14 million under this line item to fund costs of disestablishing the NOAA Corps. This is an increase of \$6.0 million over the amount provided in FY 1997 to cover the retired pay costs.

## Marine Services

Consistent with the FY 1997 Appropriation, funds from this subactivity are reflected in the three budget activities that utilize ship support (National Ocean Service, National Marine Fisheries Service, and Oceanic and Atmospheric Research) under Acquisition of Data. These funds will provide for the operation of NOAA's fleet of vessels and outsourcing arrangements with vessels of the University National Oceanographic Laboratory System.

Goal Based  
(Strategic Plan Structure)



## **Aircraft Services**

This subactivity supports all of NOAA's aircraft support services. NOAA operates uniquely configured aircraft to perform NOAA's missions including hurricane research and reconnaissance, snow surveys to support water conservation and flood control, photogrammetry for charting, marine mammals surveys, airborne lidar hydrographic surveys, and aeronautical chart updating surveys. These aircraft directly support timely and accurate storm and weather warnings and forecasts, accurate charts for safe navigation, effective stewardship of living marine resources, and studies which increase our understanding of ocean and atmospheric processes and the effects of pollution on habitats, air and ocean quality, and climate change.

The Aircraft Services request includes a decrease of \$0.5 million for base operations. This decrease in funding will result in less flight hours for Hurricane Research and Reconnaissance; Air Quality Research; Nautical Charting; and Snow Surveys. The reduced flight hours to support marine mammal surveys will result in increased costs to NMFS. The NOAA request includes funding to operate the new high-altitude (G-IV) jet for a limited number of hurricane surveillance flights during FY 1998 (135 flight hours and/or 15 missions).

| <i>Dollars in Thousands</i>              | Current Avail.<br>FY 1997 |                 | FY 1998 Pres. Req. |                 | Increase/Decrease |                 |
|--|---------------------------|-----------------|--------------------|-----------------|-------------------|-----------------|
|  | FTE                       | Amount          | FTE                | Amount          | FTE               | Amount          |
| <b>ACTIVITY REQUEST</b>                  |                           |                 |                    |                 |                   |                 |
| <b>Program Support</b>                   |                           |                 |                    |                 |                   |                 |
| <b>Administration and Services</b>       |                           |                 |                    |                 |                   |                 |
| Executive Direction and Administration   | 328                       | 20,697          | 328                | 21,408          | 0                 | 711             |
| Central Administrative Support           | 795                       | 33,000          | 795                | 31,850          | 0                 | (1,150)         |
| Retired Pay Commissioned Officers        | 0                         | 8,000           | 0                  | 14,000          | 0                 | 6,000           |
| <b>Total Administration and Services</b> | <b>1,123</b>              | <b>61,697</b>   | <b>1,123</b>       | <b>67,258</b>   | <b>0</b>          | <b>5,561</b>    |
| <i>Marine Services</i>                   | <i>0</i>                  | <i>[57,730]</i> | <i>[689]</i>       | <i>[52,528]</i> | <i>0</i>          | <i>[-5,202]</i> |
| <b>Aircraft Services</b>                 | <b>106</b>                | <b>10,000</b>   | <b>106</b>         | <b>9,900</b>    | <b>0</b>          | <b>(100)</b>    |
| <b>Total Program Support</b>             | <b>1,229</b>              | <b>71,697</b>   | <b>1,229</b>       | <b>77,158</b>   | <b>0</b>          | <b>5,461</b>    |

| <i>Dollars in Thousands</i>                        | Current Avail.<br>FY 1997 |               | FY 1998 Pres. Req. |               | Increase/Decrease |              |
|--|---------------------------|---------------|--------------------|---------------|-------------------|--------------|
|  | FTE                       | Amount        | FTE                | Amount        | FTE               | Amount       |
| <b>GOAL BASED</b>                                  |                           |               |                    |               |                   |              |
| <b>Program Support</b>                             |                           |               |                    |               |                   |              |
| Advance Short-Term Warning and Forecast Services   | 722                       | 42,742        | 722                | 43,256        | 0                 | 514          |
| Implement Seasonal to Interannual Climate Forecast | 56                        | 3,265         | 56                 | 3,300         | 0                 | 35           |
| Predict and Assess Decadal-to-Centennial Change    | 76                        | 5,170         | 76                 | 5,214         | 0                 | 44           |
| Promote Safe Navigation                            | 61                        | 3,117         | 61                 | 3,068         | 0                 | (49)         |
| Build Sustainable Fisheries                        | 196                       | 10,759        | 196                | 10,921        | 0                 | 162          |
| Recover Protected Species                          | 21                        | 1,227         | 21                 | 1,254         | 0                 | 18           |
| Sustain Healthy Coasts                             | 97                        | 5,417         | 97                 | 5,498         | 0                 | 81           |
| Infrastructure                                     |                           |               |                    | 4,656         | 0                 | 4,656        |
| <b>Total Program Support</b>                       | <b>1,229</b>              | <b>71,697</b> | <b>1,229</b>       | <b>77,158</b> | <b>0</b>          | <b>5,461</b> |



## Facilities / Construction

*Total Request: \$61,798,000*

In FY 1998, NOAA is proposing to establish a Capital Assets Acquisition Account. In addition, NOAA is proposing to eliminate the Construction Account and move those activities not requested in the Capital Assets Acquisitions Account into the Operations, Research, and Facilities (ORF) Account.

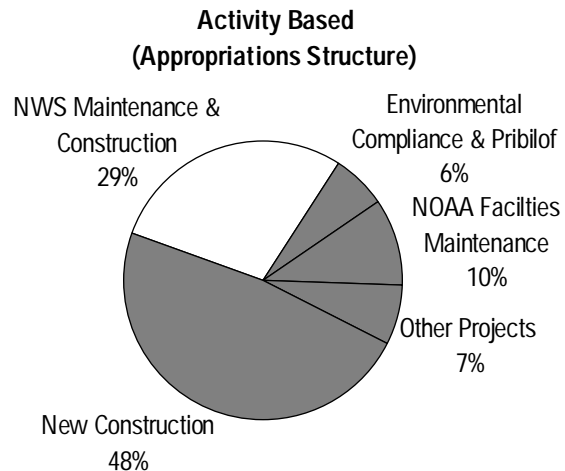
The following narrative describes the total activities previously covered in the Construction Account, and does not distinguish between appropriation accounts.

NOAA has the ongoing need to acquire a land to construct new facilities; repairs, preventive actions, make major modifications and additions to existing facilities; perform facilities maintenance and environmental compliance, and maintain the safety of its buildings. In FY 1998, \$61.8 million is requested, an increase of \$3.5 million over FY 1997. (For more details on these projects, refer to multi-year table for Capital Assets Acquisition on page 14 and the Bridge of Changes From FY 1997 to FY 1998 in the Appendix.) The following descriptions are divided into two major groupings: non-capital asset activities in ORF, and capital asset activities.

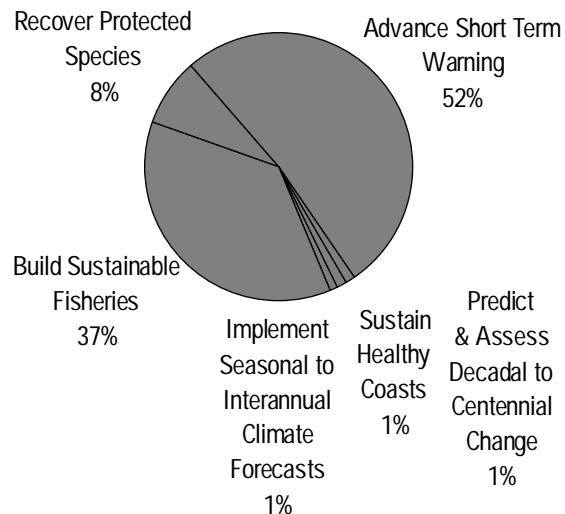
### ORF Items

#### NOAA Facilities Maintenance and Sandy Hook Lease

As the NOAA-owned facilities have an average age of 30 years, investment in significant, major repairs and upgrades becomes increasingly critical. Major systems in many facilities are well past their design life and require maintenance, repair or replacement to ensure that the facilities remain available to support NOAA's programs. NOAA requests a net increase of \$0.7 million to continue the process of identifying major facility repair and system replacement needs, and implementing the highest priority repair and renovation projects.



**Goal Based  
(Strategic Plan Structure)**



An increase of \$0.3 million is also requested for increased lease/operation and maintenance costs at the Sandy Hook Laboratory in Highlands, New Jersey.

### **Environmental Compliance and Cleanup**

NOAA requests a program increase of \$1.7 million for NOAA's nationwide Environmental Compliance Program. The program provides for compliance with Federal, state and local laws, regulations and safety requirements. With this request, NOAA will be able to establish a central link for monitoring nationwide facility compliance status, make progress in correcting deficiencies noted during the audit assessment process, and begin to institute policies and activities which will minimize the likely occurrence of future deficiencies. In accordance with Federal law, NOAA will also establish the environmental status and correct deficiencies discovered at NOAA facilities prior to their transfer to other Federal agencies or to the private sector.

NOAA requests a decrease of \$5.0 million for the Pribilof Islands, Alaska project. Over the past several years, NOAA has been in the process of assessing the contamination and performing work necessary to correct or remediate environmental problems. Work to date has included the completion of a Preliminary Assessment, an expanded site investigation, certain phases of cleanup activities, finalization of that agreement with the State of Alaska, and development of a cooperative agreement program to complete cleanup work using local entities. No funds are requested for this project in FY 1998 because the project is nearing completion.

### **WFO Facilities Maintenance**

A net increase of \$2.0 million is requested for the WFO Facilities Maintenance program which is needed to provide emergency repair and maintenance actions for operating Weather Forecast Offices across the country. The WFO Facilities Maintenance reflects the shift from primarily leased facilities to requirement owned.

### **Other Requests in ORF**

A total of \$4.5 million is requested for the Columbia River facilities, a reduction of \$0.2 million.

### **Other Changes in the Construction Account**

NOAA requests the following decreases/terminations: The Charleston Laboratory \$5.0 million; Alaska Fisheries Center \$6.0 million, Honolulu Laboratory \$2.0 million; Newport Marine Science Center \$3.5 million; National Estuarine Research Reserves facilities \$1.0 million, and the New Hampshire Environmental Technology facility \$8.5 million.

## *Construction [Capital Assets Acquisition Account]*

This account provides funding for the activities associated with multi-year construction/procurement of NOAA facilities. Currently included in this account are WFO Construction, The National Centers for Environmental Prediction, a NOAA center on the NASA Goddard Campus, the Boulder Colorado Laboratory Building, and a NMFS Laboratory at Santa Cruz, California.

### **Weather Forecast Office (WFO) Construction**

NOAA requests a total of \$13.8 million in FY 1998 to support the completion of the Weather Service major facility modernization program, including costs associated with a WFO in northern Indiana. This request represents an increase of \$1.8 million over amounts provided in FY 1997. The WFO Construction program meets the NWS facility requirements supporting the provision of public weather services and the nationwide fielding of new technology systems such as NEXRAD and AWIPS. The program involves land acquisition, facility design and engineering, site preparation, modifications, and construction of 119 WFOs and 13 collocated River Forecast Centers (RFCs).

### **Centers for Environmental Prediction (NCEP) Restructuring**

An increase of \$0.7 million is requested for NCEP restructuring and consolidation efforts the initial facility costs for the Storm Prediction Center in Norman, Okla., and the Aviation Weather Center in Kansas City, Mo. The total FY 1998 budget is \$0.7 million.

### **New Facilities Construction**

This funds NOAA's major facilities construction, renovation and consolidation projects of strategic importance to NOAA's mission. NOAA requests a net increase \$27.7 million for new facilities construction.

The budget request includes \$12.6 million for the architectural and engineering required for construction of a new NOAA operations and research center at the Goddard Space Flight Center in Greenbelt, Maryland. The funds will provide for building design, interior design, planning, and project management costs associated with development of a 350,000 gross square-foot building to accommodate 1,200 employees, visiting scientists, and contractors dedicated to NOAA's National Environmental Satellite, Data, and Information Service including the Satellite Operations Control Center, as well as the Washington, D.C.-based components of the National Weather Service's National Centers for Environmental Prediction. The request is partially offset by rent savings of \$4.7 million in ORF. The NOAA Operations and Research Facility will support scientific synergism between the NOAA Data Centers and the NASA Earth Observing System Data Information Service programs regarding science support, operations, management and technology.

Included also in the Construction activity is a decrease of \$0.1 million for the Boulder Lab.

NOAA requests \$15.2 million for the National Marine Fisheries Service Lab project at Santa Cruz, CA. The laboratory will replace the aging Tiburon Laboratory and will allow NOAA/NMFS to collocate research and certain regional office functions into a single facility. This will allow NMFS to eliminate leased space needs in Santa Rosa, Calif.

| <i>Dollars in Thousands</i>                     | Current Avail.<br>FY 1997 |                        | FY 1998 Pres. Req. |                 | Increase/Decrease |                  |
|---|---------------------------|------------------------|--------------------|-----------------|-------------------|------------------|
|   | FTE                       | Amount                 | FTE                | Amount          | FTE               | Amount           |
| <b>ACTIVITY REQUEST</b>                         |                           |                        |                    |                 |                   |                  |
| <b>Construction/Facilities</b>                  |                           |                        |                    |                 |                   |                  |
| NOAA Facilities Maintenance (ORF)               |                           |                        | 6                  | 6,488           | 6                 | 6,488            |
| <i>[Included in Construction Appropriation]</i> | <i>[6]</i>                | <i>[5,500]</i>         |                    |                 | <i>[-6]</i>       | <i>[-5,500]</i>  |
| Environmental Compliance & Pribilof (ORF)       |                           |                        | 9                  | 3,700           |                   | 3,700            |
| <i>[Included in Construction Appropriation]</i> | <i>[9]</i>                | <i>[7,000]</i>         |                    |                 | <i>[-9]</i>       | <i>[-7,000]</i>  |
| NWS Maintenance & Construction                  |                           |                        | 4                  | 17,473          | 4                 | 17,473           |
| <i>[Included in Construction Appropriation]</i> | <i>[4]</i>                | <i>[13,000]</i>        |                    |                 | <i>[-4]</i>       | <i>[-13,000]</i> |
| <i>[Included in ORF]</i>                        |                           |                        |                    | <i>[2,950]</i>  |                   | <i>[+2,950]</i>  |
| <i>[Included in CAA]</i>                        |                           |                        | <i>[4]</i>         | <i>[14,523]</i> | <i>[+4]</i>       | <i>[+14,523]</i> |
| New Construction                                |                           |                        |                    | 29,672          |                   | 29,672           |
| <i>[Included in Construction Appropriation]</i> |                           | <i>[23,200]</i>        |                    |                 |                   | <i>[-23,200]</i> |
| <i>[Included in ORF]</i>                        |                           |                        |                    |                 |                   |                  |
| <i>[Included in CAA]</i>                        |                           |                        |                    | <i>[29,672]</i> |                   | <i>[+29,672]</i> |
| Other Projects in ORF                           |                           |                        |                    | 4,465           |                   | 4,465            |
| <i>[Included in Construction Appropriation]</i> |                           | <i>[9,500]</i>         |                    |                 |                   |                  |
| <b>Total Construction/Facilities</b>            | <b><i>[19]</i></b>        | <b><i>[58,250]</i></b> | <b>19</b>          | <b>61,798</b>   | <b>0</b>          | <b>61,798</b>    |
| <i>[Included in Construction Appropriation]</i> | <i>[19]</i>               | <i>[58,250]</i>        |                    |                 | <i>[-19]</i>      | <i>[-58,250]</i> |
| <i>[Included in ORF]</i>                        |                           |                        | <i>[15]</i>        | <i>[17,603]</i> | <i>[+15]</i>      | <i>[+17,603]</i> |
| <i>[Included in CAA]</i>                        |                           |                        | <i>[4]</i>         | <i>[44,195]</i> | <i>[+4]</i>       | <i>[+44,195]</i> |



| <i>Dollars in Thousands</i>                        | Current Avail.<br>FY 1997 |               | FY 1998 Pres. Req. |               | Increase/Decrease |              |
|--|---------------------------|---------------|--------------------|---------------|-------------------|--------------|
|  | FTE                       | Amount        | FTE                | Amount        | FTE               | Amount       |
| <b>GOAL BASED</b>                                  |                           |               |                    |               |                   |              |
| <b>Construction/Facilities</b>                     |                           |               |                    |               |                   |              |
| Advance Short-Term Warning and Forecast Services   | 7                         | 21,528        | 7                  | 32,359        | 0                 | 10,831       |
| Implement Seasonal to Interannual Climate Forecast | 1                         | 1,099         | 1                  | 491           | 0                 | (608)        |
| Predict and Assess Decadal-to-Centennial Change    |                           | 1,052         |                    | 520           | 0                 | (532)        |
| Promote Safe Navigation                            |                           | 646           |                    | 183           | 0                 | (463)        |
| Build Sustainable Fisheries                        | 10                        | 26,099        | 10                 | 23,033        | 0                 | (3,066)      |
| Recover Protected Species                          | 1                         | 5,202         | 1                  | 4,607         | 0                 | (595)        |
| Sustain Healthy Coasts                             |                           | 2,624         |                    | 605           | 0                 | (2,019)      |
| <b>Total Construction/Facilities</b>               | <b>19</b>                 | <b>58,250</b> | <b>19</b>          | <b>61,798</b> | <b>0</b>          | <b>3,548</b> |

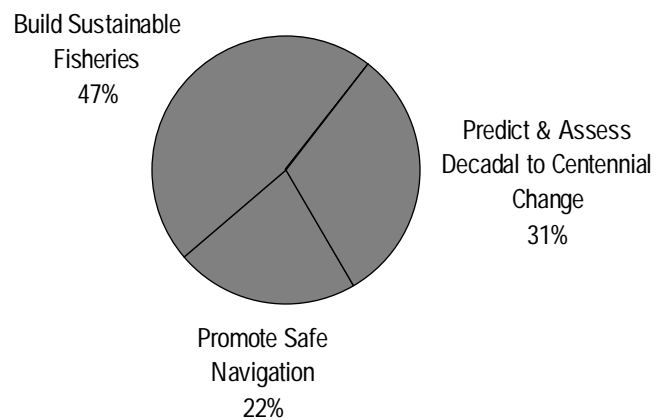
## Fleet Maintenance and Planning

*Total Request: \$11,823,000*

**F**or FY 1998, funding for programs previously requested in the Fleet Modernization, Shipbuilding and Conversion appropriation are being requested in the Fleet Maintenance and Planning activity of the ORF appropriation. Within ORF, funding is requested for the repair and maintenance of vessels, including related equipment to maintain the existing fleet and for the planning of future modernization. In future years, any funds for new construction, conversion, or repair to extend will be requested in the Capital Assets Acquisition Account.

In FY 1998, an increase of \$3.8 million is requested, bringing the funding level to \$11.8 million. This increase will provide for the maintenance on existing ships, systems improvements to enhance hydrographic survey capability, and repairs to the fisheries research ship *Miller Freeman* which operates primarily in Alaskan waters. In addition, design of a new class of acoustically quiet fisheries research vessels will be started.

### Goal Based (Strategic Plan Structure)



| <i>Dollars in Thousands</i>   | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                  | Increase/Decrease |                  |
|---|---------------------------|----------------|--------------------|------------------|-------------------|------------------|
|   | FTE                       | Amount         | FTE                | Amount           | FTE               | Amount           |
| <b>ACTIVITY BASED</b>   |                           |                |                    |                  |                   |                  |
| <b>Fleet Maintenance and Planning</b>                                     |                           |                |                    |                  |                   |                  |
| Fleet Maintenance and Planning  | 17                        | 8,000          | 12                 | 11,823           | (5)               | 3,823            |
| <i>[Included in Fleet Modernization,<br/>Shipbuilding and Conversion]</i> | <i>[17]</i>               | <i>[8,000]</i> |                    |                  | <i>[-17]</i>      | <i>[-8,000]</i>  |
| <i>[Included in Fleet Maintenance and<br/>Planning]</i>                   |                           |                | <i>[+12]</i>       | <i>[+11,823]</i> | <i>[+12]</i>      | <i>[+11,823]</i> |

| <i>Dollars in Thousands</i>                                       | Current Avail.<br>FY 1997 |              | FY 1998 Pres. Req. |               | Increase/Decrease |              |
|---|---------------------------|--------------|--------------------|---------------|-------------------|--------------|
|   | FTE                       | Amount       | FTE                | Amount        | FTE               | Amount       |
| <b>GOAL BASED</b>   |                           |              |                    |               |                   |              |
| <b>Fleet Maintenance and Planning</b>                             |                           |              |                    |               |                   |              |
| Predict and Assess Decadal-to-Centennial<br>Change                |                           | 2,385        |                    | 3,700         | 0                 | 1,315        |
| Promote Safe Navigation   | 2                         | 1,337        | 2                  | 2,601         | 0                 | 1,264        |
| Build Sustainable Fisheries                                       | 15                        | 4,278        | 10                 | 5,522         | (5)               | 1,244        |
| <b>Total Fleet Modernization, Shipbuilding<br/>and Conversion</b> | <b>17</b>                 | <b>8,000</b> | <b>12</b>          | <b>11,823</b> | <b>(5)</b>        | <b>3,823</b> |



## Fisheries Finance, Program

**(formerly Fishing Vessel Obligation Guarantee Fund)**

*Total Request: \$238,000*

Under the authority of the Merchant Marine Act of 1936 and the provisions of the Federal Credit Reform Act of 1990, the Federal Ship Financing Fund became a liquidating account for loan guarantees made prior to FY 1992. New loan guarantees made on or after October 1, 1991, were made under the Fishing Vessel Obligation Guarantee (FVOG) appropriation. The re-authorization of the Magnuson-Stevens Fishery Conservation and Management Act in September 1996 changed the program to direct loans, versus loan guarantees and thus is now titled the Fisheries Finance, Program (vice Fishing Vessel Obligations Guarantees).

The Fisheries Finance, Program makes long-term fisheries loans for vessels and shoreside facilities (including aquaculture facilities). Vessel loans do not increase overcapitalization in the fishing industry (they either reduce fishing capacity or are capacity neutral).

Capacity-reduction financing complements fisheries management. Program financing and refinancing help to stabilize vessels remaining in fisheries and shoreline facilities by providing longer-term debt service more consistent with the economically useful lives of production equipment and the fisheries' economic variability. Program financing for retiring of excess competition is repaid by increasing the productivity of vessels remaining in the fishery. The Magnuson-Stevens Fishery Conservation and Management Act as amended allows the Fisheries Finance, Program to earn interest income at a rate of two percent above its interest cost of borrowing loan capital from the U.S. Treasury. The Program income prior to the Magnuson-Stevens reauthorization was one percent, and the assumed subsidy rate (cost) was one percent. This one percent cost, per the Federal Credit Reform Act, has been appropriated annually. In FY 1997, this amount was \$250 thousand with loan authority of \$25 million.

The President's FY 1998 Budget Request is based upon the one percent subsidy rate; therefore an appropriation is requested.

The FY 1998 President's Budget requests an appropriation of \$238 thousand which will provide loan authority of \$23.8 million.

## Promote and Develop Fishery Products & Research Pertaining to American Fisheries (P & D)

*Total Request: \$4,000,000*

The American Fisheries Promotion Act (AFPA) of 1980 authorized a grants program for fisheries research and development projects and a National Fisheries Research and Development Program to be carried out with Saltonstall-Kennedy (S-K) funds. S-K funds are derived from duties on imported fisheries products. An amount equal to 30 percent of these duties is transferred to the Department of Commerce from the Department of Agriculture. The FY 1998 Budget estimates this transfer at \$66.4 million. Of this \$66.4 million, \$4.0 million will be used for the S-K grants program to develop a healthy fishery based industry (including costs of program administration); and for the National Fisheries Research and Development Program. The remainder of the transfer (\$62.4 million) will be used to offset the Operations, Research, and Facilities account.

The increase at the requested level of \$3.6 million will provide, though at a reduced level, a program with emphasis on reduction and elimination of bycatch, biotechnology research, and aquaculture. The FY 1997 available funding, including carryover from FY 1996, was \$13.6 million.

## Fishing Vessel and Gear Damage Compensation Fund (FVGDCF)

This program was authorized by the Fishermen's Protective Act of 1967, as amended by P.L. 95-376, Section 10 (f) (1), of September 18, 1978 and P.L. 96-561 of 1980. This Fund provides compensation to fishing vessel owners who sustain losses or damage to their gear or vessels attributed to other fishing vessels. The Fund is supported by a surcharge imposed upon foreign fishing permit fees and is operated through the appropriation of existing balances from previous year surcharges and interest earned. A decrease of \$200 thousand is requested since no foreign fishing vessel permit surcharges have been collected since 1984. By FY 1998 these funds will be depleted, so no appropriation is requested in FY 1998.

## Fishermen's Contingency Fund (FCF)

*Total Request: \$953,000*

Title IV of the Outer Continental Shelf Lands Act Amendments of September 18, 1978, (P.L. 95-372, Section 402) as amended, established the Fishermen's Contingency Fund. This Fund provides compensation to domestic fishermen for the damage or loss of fishing gear, and resulting economic loss due to obstructions related to oil and gas exploration, development, or production in areas of the Outer Continental Shelf.

The Fund is supported by assessments on holders of leases, explorations, permits, easements, and rights of way in areas of the Outer Continental Shelf. For FY 1997, an appropriation of \$953 thousand is requested for claims and administrative expenses. This is a reduction of \$47 thousand which is requested in order to fund other initiatives within a constrained budget.



## Foreign Fishing Observer Fund (FFOF)

*Total Request: \$189,000*

The Foreign Fishing Observer Fund provides observer coverage of foreign fishing activities within the 200-mile Exclusive Economic Zone (EEZ). The Fund is supported by fees charged to foreign fishermen for the cost of placing an observer aboard their vessel while operating within the EEZ. Beginning in FY 1985, foreign fishermen were also permitted to contract directly with NMFS approved observer contractors to obtain observers (Supplemental Observer Program).

There is expected to be little foreign fishing activity in FY 1998. The FY 1998 budget requests \$189 thousand, which is a reduction of \$7 thousand from the FY 1997 level.

Appropriated funds plus direct contracting under the Supplemental Observer Program will provide 100 percent observer coverage.

## Coastal Zone Management Fund (CZMF)

*Net Request: \$3,064,000*

The Coastal Zone Management Fund was established by the Coastal Zone Reauthorization Amendments of 1990 (CZARA). Section 308 of this Act authorized the CZMF to be used first for the administrative costs of the Coastal Zone Management Program, and secondly for six other type of projects and grants. The FY 1998 budget proposes that \$5.6 million be used for program administration and \$2.2 million be used for the other specified purposes. The budget proposes that all funding for the National Estuarine Research Reserve System (NERRS) come from NOAA's OR&F appropriation. Of the \$7.8 million of budget authority requested, \$4.7 million will be offset from collections.

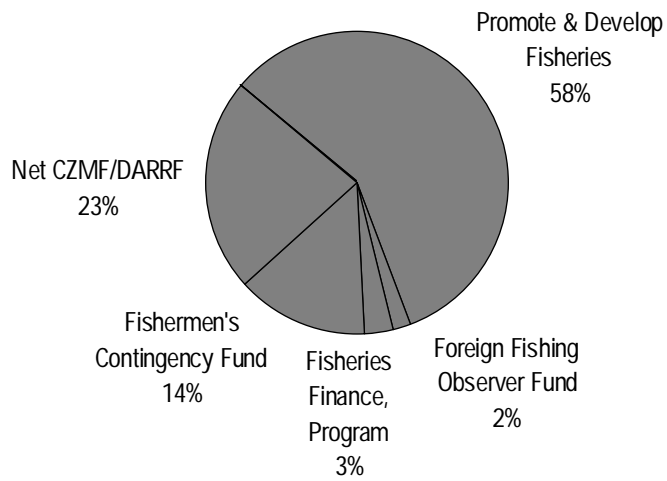
FY 1998 is the last year that expenditures from this fund can remain at the \$7.8 million level, since the Fund balance will have fallen to approximately \$500 thousand. Beginning in FY 1999 annual expenditures will have to be reduced to approximately \$5 million.

## Damage Assessment And Restoration Revolving Fund (DARRF)

*Net Request: \$-1,500,000*

The Damage Assessment and Restoration Revolving Fund (DARRF) was established under Section 1012(a) of the Oil Pollution Act of 1990, to facilitate oil and hazardous material release response, damage assessment, and natural resource restoration activities of the National Oceanic and Atmospheric Administration. The DARRF provides for the deposit of sums transferred by any party or governmental entity and, to retain for future use, funds that are recovered through settlement or awarded by court or recovered by NOAA through negotiated settlement or reimbursement. In FY 1998, the net of budget authority transfers from the Department of Interior (\$3.7 million) and to ORF (\$5.2 million) will result in a net budget of \$-1.5 million for this account.

**Other Accounts**  
**Total Request \$6,944,000**



| <i>Dollars in Thousands</i>                      | Current Avail.<br>FY 1997 |               | FY 1998 Pres. Req. |              | Increase/Decrease |                 |
|--|---------------------------|---------------|--------------------|--------------|-------------------|-----------------|
|  | FTE                       | Amount        | FTE                | Amount       | FTE               | Amount          |
| <b>Other Accounts</b>                            |                           |               |                    |              |                   |                 |
| Construction Appropriation                       | 19                        | 58,250        | 0                  | 0            | 19                | (58,250)        |
| <i>Included in CAA</i>                           |                           |               | [4]                | [44,195]     | [4]               | [+44,195]       |
| <i>Included in ORF</i>                           |                           |               | [15]               | [17,603]     | [15]              | [+17,603]       |
| Fleet Modernization, Shipbuilding and Conversion | 17                        | 8,000         | 0                  | 0            | (17)              | (8,000)         |
| <i>Included in ORF</i>                           |                           |               | [12]               | [11,823]     | [12]              | [+11,823]       |
| Promote and Develop Fisheries                    | 4                         | 381           | 4                  | 4,000        | 0                 | 3,619           |
| Fishing Vessel and Gear Damage Fund              | 2                         | 200           | 0                  | 0            | (2)               | (200)           |
| Fishermen's Contingency Fund                     | 2                         | 1,000         | 2                  | 953          | 0                 | (47)            |
| Foreign Fishing Observer Fund                    | 0                         | 196           | 0                  | 189          | 0                 | (7)             |
| DARRF  | 0                         | (1,500)       | 0                  | (1,500)      | 0                 | 0               |
| Fisheries Finance, Program                       | 0                         | 250           | 0                  | 238          | 0                 | (12)            |
| Coastal Zone Management Fund                     | 49                        | 7,800         | 49                 | 7,800        | 0                 | 0               |
| CZMF-Mandatory Collections                       | 0                         | (4,400)       | 0                  | (4,736)      | 0                 | (336)           |
| <b>Total B.A., Other Accounts</b>                | <b>93</b>                 | <b>70,177</b> | <b>55</b>          | <b>6,944</b> | <b>(38)</b>       | <b>(63,233)</b> |

# STRATEGIC PLAN

## The NOAA Strategic Plan

### *An FY 1998 Budgetary Overview*

#### **Vision**

*For the year 2005, NOAA envisions a world in which societal and economic decisions are coupled strongly with a comprehensive understanding of the environment. Environmental stewardship, assessment and prediction will serve as keystones to enhancing economic prosperity and the quality of life, better protecting lives and property, and strengthening the U.S. balance of trade. This vision depends on actions now that:*

- ❖ Create and disseminate reliable assessments and predictions of weather, climate, space environment, ocean and living marine resources, nautical, aeronautical and geodetic phenomena and systems.
- ❖ Implement integrated approaches to environmental management and ocean and coastal resources development for economic and social health, protection of essential fish habitat, and recovery of endangered and threatened species of fish and marine mammals.
- ❖ Ensure continuous operational observing capabilities—from satellites to ships to radars to data buoys.
- ❖ Build and use new information networks.
- ❖ Develop public-private and international partnerships for the expansion and transfer of environmental knowledge and technologies.
- ❖ Invest in scientific research and the development of new technologies to improve current operations and prepare for the future.
- ❖ Improve NOAA's abilities to serve its customers and forge stronger ties with its partners and stakeholders.

#### **Achieving NOAA's Vision for 2005**

NOAA's Strategic Plan for 1995-2005 describes the goals and objectives that have been established to fulfill its vision. The strategy consists of seven inter-related goals that are grouped within the two missions of *Environmental Assessment and Prediction* and *Environmental Stewardship*. The execution of NOAA's goal-based strategy depends strongly on a stable infrastructure and administrative and human resources, as well as on the underlying capabilities of the agency as a national resource for research, observing systems, and environmental data and information services.

NOAA's FY 1998 budgetary overview by strategic goal follows. Systematic, cross-cutting measures of performance are provided as indicators of expected progress for the proposed levels of investment. Resource charts and tables provide a convenient crosswalk between the goal-based budget request and the traditional activity-based budget.

# Advance Short-Term Warning and Forecast Services

Total Request \$1,178,434,000

## Vision

NOAA's vision for 2005 is to provide significantly improved short-term warning and forecast products and services that enhance public safety and the economic productivity of the Nation. NOAA will enhance its ability to observe, understand, and model the environment, and effectively disseminate products and services to users.

## Challenge

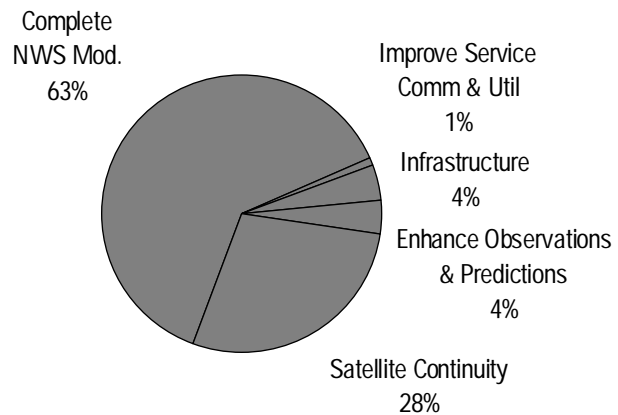
Our environment has profound effects on human welfare and economic well being. Each year, hundreds of lives and billions of dollars are lost due to severe storms, floods and other natural events that could be predicted minutes to months in advance. NOAA's current ability to predict short-term change is restricted by observations that are incomplete in time and space. This limits the ability to improve basic understanding, and predictive modeling of weather and other natural phenomena. NOAA must improve its observing systems, develop a better understanding of natural processes, and enhance predictive models and dissemination systems.

## Implementation Strategy

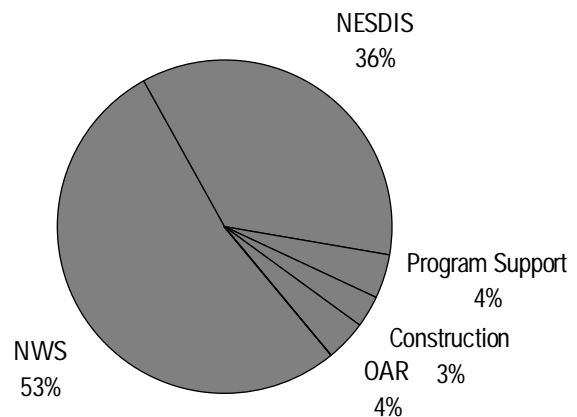
Objectives of this goal are to:

- ❖ Complete the modernization and restructuring of the National Weather Service (NWS) and ensure continuation of services to the public.
- ❖ Maintain continuous operational satellite coverage critical for warnings and forecasts.
- ❖ Strengthen observing and prediction systems through scientific, technological and programmatic advances, and international cooperation. This objective will be achieved in cooperation with the U.S. Weather Research Program (USWRP) by incorporating the scientific and technologic advances from the USWRP into service improvements.

Strategic Plan Objectives



Participation by Activity



- ❖ Improve customer service to the public, emergency managers, the media and private forecast planners through effective communication and utilization of NOAA's products.

### **Benefits**

Increasing our understanding of the environment through research and investing in new technologies will provide more accurate and timely weather warnings and forecasts required by the Nation. Improved forecasts will support management of water resources, and help avoid flood damage. Extended forecasts of solar and geomagnetic disturbances will increase efficiencies for space operations, and power generation and satellite communications networks. Advanced modeling techniques and more complete observations will reduce uncertainties in hurricane track prediction, saving millions of dollars through evacuation costs avoided. Accurate outlooks of future conditions will provide better information for planning weather sensitive activities over land and ocean.

### **FY 1996 Accomplishments**

The Nation continued to experience the benefits of weather service modernization during FY 1996. The NWS installed an additional 19 NEXRAD radars, 28 Automated Surface Observing Systems, and 13 Advanced Weather Interactive Processing Systems. Full Stage I staffing was completed at an additional nineteen Weather Forecast Offices (WFOs), while four new WFO facilities were built or leased. With the launch and positioning of GOES-9, the country now has two advanced geostationary weather satellites providing complete coverage of the U.S. The National Weather Service modernization led to significant improvements in the accuracy and timeliness of warnings and forecasts of severe weather events in FY 1996. These improvements can be directly attributed to saving lives and reducing the effects of natural disasters. For example:

- ❖ The NWS issued three- to five-day advance forecasts of the east coast blizzard of 1996. Acting on this information, emergency officials in Virginia declared a state of emergency before the first flakes fell, while United Airlines canceled all flights and moved its aircraft out of the east before the storm hit.
- ❖ During Hurricane Fran, the NWS issued warnings 31 hours before landfall; flood potential statements two to three days in advance as the storm headed north; and provided six hours of lead time for flash flooding.
- ❖ NOAA's Geophysical Fluid Dynamics Laboratory (GFDL) hurricane model, implemented in 1995, continued to provide excellent guidance to hurricane forecasters, and has outperformed other track models.
- ❖ The number of tornadoes through the end of 1996 exceeded that in a typical year. However, the number of lives lost as a result of these storms was well



below that during a normal year. With new technologies, NWS forecasters issued numerous warnings with lead-times in excess of 15 minutes, minimizing the loss of life.

### **Key FY 1998 Activities**

- ❖ Conduct an examination of modernized technologies and their potential future uses in all economic sectors.
- ❖ Assess the upper air network to determine the best-mix of cost-effective observing systems to operate in the future.
- ❖ Continue deployment of the Advanced Weather Interactive Processing Systems (AWIPS).
- ❖ Initiate procurement process for the Class VIII supercomputer.
- ❖ Continue the procurement, launching, and operation of polar orbiting satellites and the follow-on series of geostationary weather satellites.
- ❖ Improve high resolution hurricane forecasting models by providing additional flight hours and dropsondes associated with the new high altitude jet.

**Key Performance Measures**

|   | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|------|------|------|------|------|
| <b>Flash Flood Warning:</b>                       |      |      |      |      |      |
| Lead time (min)                                   | 17   | 17   | 21   | 27   | 30   |
| Accuracy (%)                                      | 58   | 58   | 63   | 74   | 78   |
| No lead time (%)                                  | 64   | 64   | 58   | 40   | 35   |
| <b>Severe Thunderstorm Warnings:</b>              |      |      |      |      |      |
| Lead time (min)                                   | 15   | 15   | 18   | 18   | 18   |
| Accuracy (%)                                      | 73   | 75   | 80   | 82   | 83   |
| <b>Tornado Warnings:</b>                          |      |      |      |      |      |
| Lead time (min)                                   | 8    | 9    | 11   | 11   | 12   |
| Accuracy (%)                                      | 53   | 60   | 64   | 66   | 68   |
| <b>Hurricane Landfall Warnings:</b>               |      |      |      |      |      |
| Accuracy of Landfall (km)<br>w/ 24 hour lead time | 185  | 135  | 130  | 145  | 135  |
| <b>Temperature:</b>                               |      |      |      |      |      |
| Correct forecasts (%)                             | 82   | 84   | 85   | 86   | 86   |
| Correct onset freezing (%)                        | 68   | 72   | 74   | 76   | 77   |
| <b>Precipitation Forecasts:</b>                   |      |      |      |      |      |
| Lead time (days advance)                          | 2.2  | 2.3  | 2.3  | 2.3  | 2.3  |
| <b>Snow Forecasts:</b>                            |      |      |      |      |      |
| Accuracy heavy snow (%)                           | 39   | 42   | 44   | 45   | 50   |
| <b>Coastal Winds Forecast Improvements</b>        |      |      |      |      |      |
| Lead time (hours)                                 | 48   | 48   | 48   | 48   | 48   |
| Accuracy (meters/sec)                             | 2.5  | 2.5  | 2.5  | 2.5  | 2.5  |
| Resolution (km)                                   | 80   | 80   | 80   | 80   | 80   |

| <i>Dollars in Thousands</i>                                   | Current Avail.<br>FY 1997 |                  | FY 1998 Pres. Req. |                  | Increase/Decrease |               |
|---|---------------------------|------------------|--------------------|------------------|-------------------|---------------|
| <b>ACTIVITY REQUEST</b>                                       | FTE                       | Amount           | FTE                | Amount           | FTE               | Amount        |
| <b>Advance Short-Term Warning and Forecast Services</b>       |                           |                  |                    |                  |                   |               |
| National Ocean Service  | 0                         | 150              | 0                  | 150              | 0                 | 0             |
| Oceanic and Atmospheric Research                              | 296                       | 51,954           | 296                | 49,579           | 0                 | (2,375)       |
| National Weather Service                                      | 5,090                     | 623,244          | 4,785              | 629,577          | (305)             | 6,333         |
| National Environmental Satellite, Data & Information Service  | 541                       | 399,865          | 541                | 423,513          | 0                 | 23,648        |
| Program Support   | 722                       | 42,742           | 722                | 43,256           | 0                 | 514           |
| Construction  | 7                         | 21,528           | 7                  | 32,359           | 0                 | 10,831        |
| <b>Total Advance Short-Term Warning and Forecast Services</b> | <b>6,656</b>              | <b>1,139,483</b> | <b>6,351</b>       | <b>1,178,434</b> | <b>(305)</b>      | <b>38,951</b> |

| <i>Dollars in Thousands</i>                                   | Current Avail.<br>FY 1997 |                  | FY 1998 Pres. Req. |                  | Increase/Decrease |               |
|---|---------------------------|------------------|--------------------|------------------|-------------------|---------------|
| <b>GOAL BASED</b>   | FTE                       | Amount           | FTE                | Amount           | FTE               | Amount        |
| <b>Advance Short-Term Warning and Forecast Services</b>       |                           |                  |                    |                  |                   |               |
| Complete NWS Modernization                                    | 5,146                     | 712,420          | 4,841              | 737,491          | (305)             | 25,071        |
| Satellite Continuity  | 525                       | 323,686          | 525                | 333,659          | 0                 | 9,973         |
| Enhance Observations & Predictions                            | 338                       | 55,019           | 338                | 52,049           | 0                 | (2,970)       |
| Improve Service Communication and Utilization                 | 21                        | 2,642            | 21                 | 2,642            | 0                 | 0             |
| Infrastructure  | 626                       | 45,716           | 626                | 52,593           | 0                 | 6,877         |
| <b>Total Advance Short-Term Warning and Forecast Services</b> | <b>6,656</b>              | <b>1,139,483</b> | <b>6,351</b>       | <b>1,178,434</b> | <b>(305)</b>      | <b>38,951</b> |



# Implement Seasonal to Interannual Climate Forecasts

Total Request \$115,263,000

## Vision

NOAA, working together with academic and multinational partners, will provide one-year lead-time forecasts of known skill of global climate variability, especially El Niño and the consequent precipitation and surface temperature distributions. These forecasts will increase society's ability to mitigate economic losses and social disruption.

## Challenge

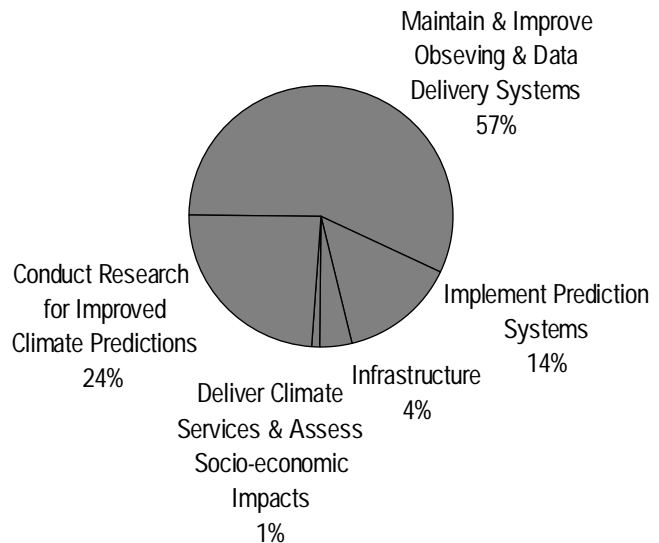
The largest interannual climate variability that has a degree of predictability is caused by the El Niño-Southern Oscillation (ENSO) phenomenon in the Pacific Ocean. Temperature and precipitation patterns, changes in ocean circulation, and changes in storm frequency caused by ENSO have global effects on economies and planning. Based on the application of ENSO-related research, NOAA has begun issuing monthly and seasonal probability outlooks for temperature and rainfall for up to a year in advance. The challenge is to introduce an operational program for the systematic production and application of regionally tailored climate forecasts. Planned actions represent an end-to-end integrated approach to establishing such a system, including the multinational infrastructure needed to generate and transfer useful climate information and forecasts.

## Implementation Strategy

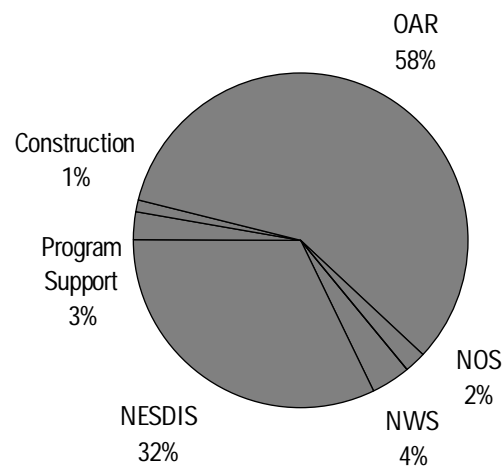
Objectives of this goal are to:

- ❖ Deliver useful seasonal to interannual climate forecasts for the U.S. and collaborate in a multinational effort to generate and use similar forecasts.
- ❖ Enhance global observing and data systems required to provide data for the initialization and validation of model predictions of seasonal to interannual climate variations.

## Strategic Plan Objectives



## Participation by Activity



- ❖ Invest in process and modeling research that leads to improved predictability of temperature and rainfall distributions.
- ❖ Assess the impacts of climate variability on human activity and economic potential, and improve public education so that climate forecasts are understood and acted upon.

### **Benefits**

We can now predict El Niño events to a level of skill and with enough lead time that hundreds of millions of dollars a year could be saved in the U.S. economy and abroad. ENSO forecasts will improve fisheries management, as warm ENSO events have been associated with reduced marine catches. Global forecasts of climate variability will enhance agricultural, water resources, and other economic and social response planning. These forecasts will be a major contribution to U.S. commitments to the United Nations Conference on Environment and Development (UNCED).

### **FY 1996 Accomplishments**

During FY 1996, NOAA continued to work toward the establishment of an International Research Institute (IRI) and associated Applied Research Center to provide for capabilities for climate forecasting and applications and for facilitating the transition from ENSO forecasting to operations. Key accomplishments across the four objectives supporting this strategic goal include:

- ❖ Developing and implementing an improved version of the coupled forecast model for ENSO at the National Centers for Environmental Prediction (NCEP), resulting in skill improvements over the entire record from 1981 to present.
- ❖ Developing the methodology for making direct probabilistic seasonal forecasts of rainfall and temperature variability over North America using atmospheric general circulation model simulations and forecasts.
- ❖ Successfully predicting, six months in advance, a recent cold event in the tropical Pacific utilizing Global Circulation Models.
- ❖ Upgrading data sets with climate quality observations and beginning a four-year project to evolve the Tropical Oceans Global Atmosphere (TOGA) Observing System from research to operations in support of routine ENSO predictions.
- ❖ Implementing modeling and diagnostic projects within the context of GOALS (Global Ocean-Atmosphere-Land System) and GEWEX (Global Energy and Water Cycle Experiment) to improve modeling of the influence of the global upper oceans, land moisture, vegetation, snow and sea ice on seasonally varying climate. GOALS projects have facilitated investigation of the interdecadal modulation of ENSO.

- ❖ Conducting socio-economic impacts research on the value of ENSO forecasting for agriculture planning in Texas, land use decisions in the western U.S., and management of fisheries in the Pacific Northwest.

### **Key FY 1998 Activities**

**Develop Operational ENSO Observations.** Transition the eastern Pacific TOGA buoy network to operations while maintaining the research base. This initiative seeks support for the combination of in-situ measurements proven to be essential for operational ENSO forecasting when jointly used with remotely sensed parameters and global models. Virtual Laboratory activities will determine the blend of measurement types and arrays. This observing system was determined by the National Academy of Sciences to be the highest priority for continuation to support seasonal-to-interannual predictions.

**Operational Forecast Prediction System.** Improve dynamical seasonal prediction activities at NCEP, automate the production of climate forecasts, and deliver forecast and monitoring products.

**International Research Institute.** NOAA's participation in a multinational planning process for an IRI will culminate in the signing of an agreement establishing the Institute designed to develop and distribute experimental climate predictions multinationally, conduct modeling and applications research and development, and continue training in techniques employed in climate modeling and forecasts development, interpretation and application.

**Research for Improved Climate Predictions.** Continue research to improve seasonal-to-interannual predictions, and expand efforts beyond the initial focus on predictability in the tropical Pacific to examine the impacts of other oceans and land surface processes through investments in the GOALS and GEWEX programs.

**Satellite Active Archive.** Make basic improvements in accessing, storing and retrieving data. The Satellite Active Archive initiative will also provide funding to develop interoperability with the Earth Observing System Data and Information System (EOSDIS) and to add a data reprocessing capability.

**NOAA Virtual Data System (NVDS).** Continue to work to link NESDIS data centers and other NOAA centers of data and consolidate information technology functions via an NVDS. NVDS will be based on a high volume of data requests upon the 400 terabyte data archive. The data archive will be easily accessible to the user community through the Internet or by request.

**Deliver Climate Services.** Provide dependable delivery of climate services, defined as providing climate predictions, products, and information to users for applications that guide sustainable development, reduce commercial risk, and

achieve social benefits. In addition, an organized program of research on socio-economic impacts and vulnerabilities and assessments to provide policy-relevant information will maximize economic and social benefits.

| <b>Key Performance Measures</b>                                    |      |      |      |      |      |
|--|------|------|------|------|------|
|  | 1994 | 1995 | 1996 | 1997 | 1998 |
| <b>Dynamic forecast model operational (%)</b>                      | 25   | 50   | 50   | 50   | 55   |
| <b>ENSO Forecasts</b>  |      |      |      |      |      |
| Accuracy (correlation)*  | .80  | .76  | .85  | .85  | .85  |
| Lead time (years)†   | .50  | .50  | .50  | .50  | .50  |
| <b>U.S. Temperature/Precipitation</b>                              |      |      |      |      |      |
| Skill score (%)§   | 12   | 11   | 11   | 13   | 15   |
| Lead time (years)  | .25  | .50  | .50  | .50  | .50  |
| <b>TOGA observing system operational (%)</b>                       | -    | -    | 0    | 25   | 25   |
| <b>New and Improved data sets developed and produced (#)</b>       | -    | -    | 7    | 7    | 7    |
| <b>Continental Scale Int'l Project experiments implemented (%)</b> | -    | -    | 20   | 40   | 60   |
| <b>GOALS experiments implemented (%)</b>                           | -    | -    | 5    | 15   | 20   |

\* Accuracy is the pattern correlation of the forecast relative to actual conditions.

† Lead time is measured in years (e.g., 0.25 is one season).

§ Skill score means 100 times the number of correct forecasts made (N), with adjustments for those cases where the actual conditions are equal to the climatological or random-choice expectation (E).



| <i>Dollars in Thousands</i>                                     | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |              |
|---|---------------------------|----------------|--------------------|----------------|-------------------|--------------|
|   | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount       |
| <b>ACTIVITY REQUEST</b>   |                           |                |                    |                |                   |              |
| <b>Implement Seasonal to Interannual Climate Forecast</b>       |                           |                |                    |                |                   |              |
| National Ocean Service  | 0                         | 2,500          | 0                  | 2,800          | 0                 | 300          |
| Oceanic and Atmospheric Research                                | 289                       | 60,609         | 289                | 66,776         | 0                 | 6,167        |
| National Weather Service  | 54                        | 6,564          | 54                 | 4,688          | 0                 | (1,876)      |
| National Environmental Satellite, Data & Information Service    | 266                       | 38,175         | 266                | 37,208         | 0                 | (967)        |
| Program Support   | 56                        | 3,265          | 56                 | 3,300          | 0                 | 35           |
| Construction  | 1                         | 1,099          | 1                  | 491            | 0                 | (608)        |
| <b>Total Implement Seasonal to Interannual Climate Forecast</b> | <b>666</b>                | <b>112,212</b> | <b>666</b>         | <b>115,263</b> | <b>0</b>          | <b>3,051</b> |

| <i>Dollars in Thousands</i>                                     | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |              |
|---|---------------------------|----------------|--------------------|----------------|-------------------|--------------|
|   | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount       |
| <b>GOAL BASED</b>   |                           |                |                    |                |                   |              |
| <b>Implement Seasonal to Interannual Climate Forecast</b>       |                           |                |                    |                |                   |              |
| Implement Prediction Systems                                    | 73                        | 17,292         | 73                 | 15,773         | 0                 | (1,519)      |
| Maintain and Improve Observing and Data Delivery Systems        | 429                       | 60,903         | 429                | 65,534         | 0                 | 4,631        |
| Conduct Research for Improved Climate Predictions               | 109                       | 27,957         | 109                | 28,445         | 0                 | 488          |
| Deliver Climate Services and Assess Socio-economic Impacts      | 0                         | 1,022          | 0                  | 1,036          | 0                 | 14           |
| Infrastructure  | 55                        | 5,038          | 55                 | 4,475          | 0                 | (563)        |
| <b>Total Implement Seasonal to Interannual Climate Forecast</b> | <b>666</b>                | <b>112,212</b> | <b>666</b>         | <b>115,263</b> | <b>0</b>          | <b>3,051</b> |



# Predict and Assess Decadal to Centennial Change

Total Request \$90,630,000

## Vision

NOAA will provide science-based information for decisions regarding decadal-to-centennial changes in the global environment, specifically for: climate change and greenhouse warming; ozone layer depletion; and air quality improvement.

## Challenge

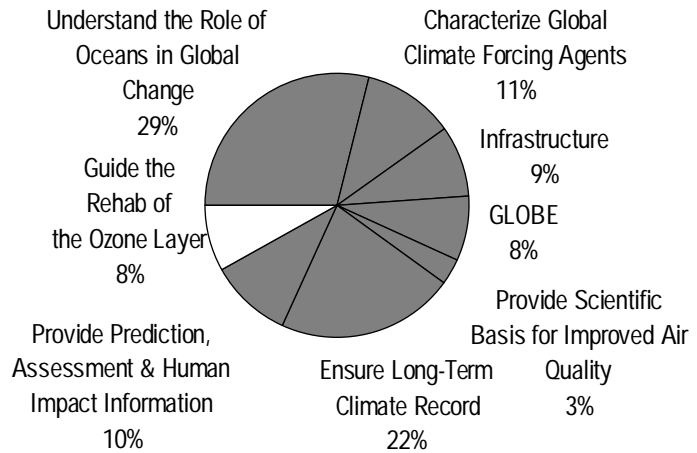
Our planet is naturally a place of change, often with severe impacts on humans. Human activities now are inducing additional changes, including atmospheric pollution and thinning of the stratospheric ozone layer. These changes create critical prediction and assessment needs for the world community. Global models providing predictions must be strengthened through a better understanding of the atmospheric and oceanic processes involved in global changes and through improvements in global observing systems. The challenge is to understand and foresee the natural and human-induced variations of the approaching few decades in order to make sound economic and social decisions.

## Implementation Strategy

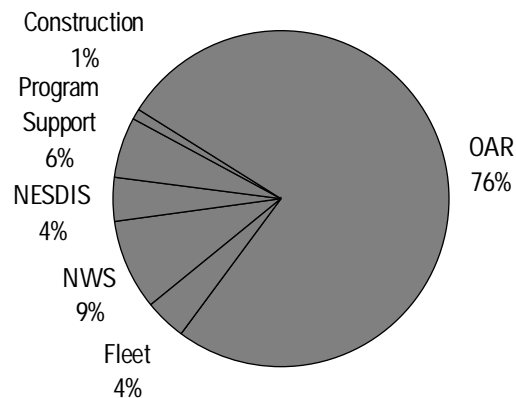
Objectives of this goal are to:

- ❖ Characterize the agents and processes that force decadal to centennial climate change.
- ❖ Examine the role of the ocean as a reservoir of both heat and carbon dioxide to address a major source of uncertainty in climate models.
- ❖ Ensure a long-term climate record by enhancing domestic and international weather networks, observing procedures, and information management systems.
- ❖ Guide the rehabilitation of the ozone layer by providing the scientific basis for policy choices associated with ozone-depleting compounds.

Strategic Plan Objectives



Participation by Activity



- ❖ Provide the scientific basis for better air quality by improving the understanding of high surface ozone episodes in rural areas and by establishing a monitoring network to detect cleaner air quality.
- ❖ Develop models for the prediction of long-term climate change, carry out scientific assessments, and provide human impacts information.

### **Benefits**

The nations have committed to eliminating production of compounds that deplete the ozone layer. Research is not only helping to define the ozone-friendly replacement compounds, but also to document that the recovery of the ozone layer is as expected. Anticipatory research on global climate change supports sustainable development by providing timely information to society to make sound decisions to mitigate against or adapt to changes that require several decades to reverse once underway. The U.S. Clean Air Act Amendments of 1990 requires pollutant emission reductions to improve the Nation's air quality. New research is pointing to more effective ways to meet those goals, thereby avoiding costly over-regulation. Providing research results that address key scientific uncertainties, presenting the improvements in understanding in up-to-date assessments, and summarizing this knowledge in policy-relevant terms to government and industrial leaders are the cornerstones of environmental stewardship.

### **FY 1996 Accomplishments**

NOAA continues to make progress in understanding and documenting decadal-to-centennial changes. NOAA is providing major scientific input and leadership to the Intergovernmental Panel on Climate Change (IPCC), the World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP), and the newly formed North American Research Strategy for Tropospheric Ozone (NARSTO). NOAA efforts in FY 1996 have:

- ❖ Documented a decrease in tropospheric levels of an ozone-depleting substance, a first-time observation that demonstrates the emerging effectiveness of the Montreal Protocol.
- ❖ Demonstrated the influences of anthropogenic and natural emissions on the production of surface-level ozone pollution in the southeastern U.S. and determined that air quality issues are regional, rather than local.
- ❖ Led U.S. efforts to organize the first assessment of policy-relevant air quality scientific findings for the U.S. as part of NARSTO.
- ❖ Obtained a more realistic estimate of the transient response of climate to increasing greenhouse gases and atmospheric aerosols by use of a coupled ocean-atmosphere model with higher computational resolution.

- ❖ Completed a field campaign to investigate the radiative effects of naturally derived aerosols in the Southern Hemisphere, yielding data that will reduce uncertainty in the calculation of climate forcing by aerosols.

### **Key FY 1998 Activities**

- ❖ Characterize the climate-change forcing elements: Provide a better quantification of the role of tropospheric ozone in altering the Earth's radiation budget.
- ❖ Help guide the rehabilitation of the ozone layer: Lead the 1998 Ozone Assessment for the Montreal Protocol on the United Nations. Provide scientific input to the assessments of trends in ozone and ozone-depleting substances, the understanding of ozone-depleting processes, and predictions of the recovery of the ozone layer in the next century.
- ❖ Provide the scientific basis for improved air quality: Describe the origin of high ozone levels in rural areas, where crop and forest damage are of growing concern. Help lead and contribute to a series of critical review scientific papers that will cover the science of regional ozone production and will lead to an assessment for better managing the Nation's air quality.
- ❖ Develop better models for climate prediction: Help lay the groundwork for an improved understanding of the radiation science in climate models, which will provide insight to the climate predictions contained in the year-2000 assessment by the IPCC.
- ❖ Ensure a long-term climate record: Strengthen on-going climate record observations to prepare for year-2000 research information needs and for outyear assessments of climate variability.

**Key Performance Measures**

|   | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|------|------|------|------|------|
| Operational ozone stations to measure tropospheric ozone trends for greenhouse gases (#)  | 1    | 1    | 1    | 2    | 2    |
| Commercially viable CFC substitutes evaluated for greenhouse warming potential (%)  | 0    | 25   | 50   | 50   | 100  |
| Commercially viable CFC substitutes evaluated for ozone depletion potential   | 0    | 25   | 50   | 50   | 100  |
| Completion of documenting the turnover of ozone-depleting gases to verify the effect of global policy actions   | N/A  | N/A  | N/A  | 40   | 100  |
| Completion of initial state of science assessment of rural ozone chemistry (%)  | 0    | 10   | 25   | 50   | 75   |
| Completion of upgrade and operation of early detection of air quality stations  | -    | 0    | 20   | 30   | 50   |
| Inventory the NOAA research that will contribute to the Year-2000 IPCC scientific assessment of climate change and provide this information to IPCC planning (% completion) | N/A  | N/A  | N/A  | 25   | 100  |

| <i>Dollars in Thousands</i>                                  | Current Avail.<br>FY 1997 |               | FY 1998 Pres. Req. |               | Increase/Decrease |              |
|--|---------------------------|---------------|--------------------|---------------|-------------------|--------------|
|  | FTE                       | Amount        | FTE                | Amount        | FTE               | Amount       |
| <b>ACTIVITY REQUEST</b>                                      |                           |               |                    |               |                   |              |
| <b>Predict and Assess Decadal-to-Centennial Change</b>       |                           |               |                    |               |                   |              |
| National Ocean Service                                       | 0                         | 0             | 0                  | 0             | 0                 | 0            |
| Oceanic and Atmospheric Research                             | 307                       | 67,394        | 307                | 69,788        | 0                 | 2,394        |
| National Weather Service                                     | 55                        | 8,189         | 55                 | 8,189         | 0                 | 0            |
| National Environmental Satellite, Data & Information Service | 0                         | 3,219         | 0                  | 3,219         | 0                 | 0            |
| Program Support  | 76                        | 5,170         | 76                 | 5,214         | 0                 | 44           |
| Construction   | 0                         | 1,052         | 0                  | 520           | 0                 | (532)        |
| Fleet Modernization, Shipbuilding &                          | 0                         | 2,385         | 0                  | 3,700         | 0                 | 1,315        |
| <b>Total Predict and Assess Decadal-to-Centennial Change</b> | <b>438</b>                | <b>87,409</b> | <b>438</b>         | <b>90,630</b> | <b>0</b>          | <b>3,221</b> |

| <i>Dollars in Thousands</i>                                  | Current Avail.<br>FY 1997 |               | FY 1998 Pres. Req. |               | Increase/Decrease |              |
|--|---------------------------|---------------|--------------------|---------------|-------------------|--------------|
|  | FTE                       | Amount        | FTE                | Amount        | FTE               | Amount       |
| <b>GOAL BASED</b>  |                           |               |                    |               |                   |              |
| <b>Predict and Assess Decadal-to-Centennial Change</b>       |                           |               |                    |               |                   |              |
| Characterize Global Climate Forcing Agents                   | 66                        | 9,601         | 66                 | 9,709         | 0                 | 108          |
| Understand the Role of Oceans in Global Change               | 155                       | 26,147        | 155                | 26,354        | 0                 | 207          |
| Guide the Rehabilitation of the Ozone Layer                  | 42                        | 7,183         | 42                 | 7,291         | 0                 | 108          |
| Provide Prediction, Assessment, & Human Impact Info.         | 40                        | 7,498         | 40                 | 8,653         | 0                 | 1,155        |
| Ensure a Long-Term Climate Record                            | 75                        | 20,085        | 75                 | 19,901        | 0                 | (184)        |
| Provide the Scientific Basis for Improved Air Quality        | 0                         | 3,034         | 0                  | 3,034         | 0                 | 0            |
| GLOBE  | 4                         | 6,000         | 4                  | 7,000         | 0                 | 1,000        |
| Infrastructure   | 56                        | 7,861         | 56                 | 8,688         | 0                 | 827          |
| <b>Total Predict and Assess Decadal-to-Centennial Change</b> | <b>438</b>                | <b>87,409</b> | <b>438</b>         | <b>90,630</b> | <b>0</b>          | <b>3,221</b> |





# Promote Safe Navigation

Total Request \$84,690,000

## Vision

By 2005, merchant ships, fishing vessels and recreational boats will safely ply our coastal waters, electronically guided by space-based navigation and advanced information technologies. NOAA will revolutionize U.S. navigation, mapping and surveying and assist commercial shipping in moving increased cargoes safely and efficiently. NOAA will provide a precise satellite derived reference system as the basis for the Nation's geographical positioning needs.

## Challenge

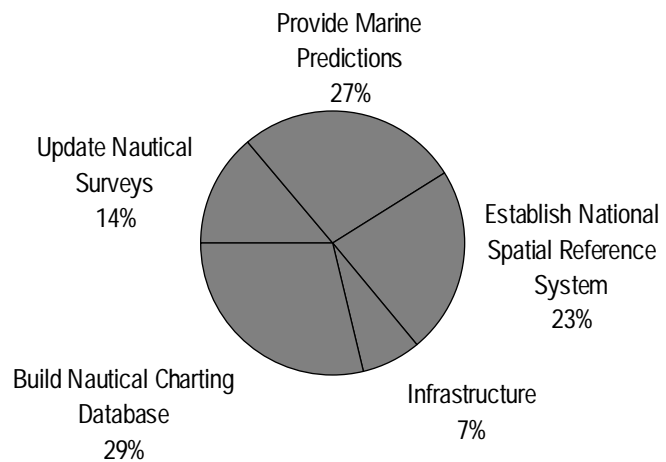
Ships have doubled in length, width and draft in the last 50 years and seagoing commerce has tripled, leading to increased risk in the Nation's ports. Greater dependence on foreign oil has increased the potential for disaster due to spills. From 1980 to 1988, tankers in the U.S. were involved in 936 moving accidents, 55 fires and explosions, and 95 deaths. Navigation tools must be modernized, as 60% of NOAA's nautical charting data were obtained before 1940 with obsolete methods. Two-thirds of the data used for tidal predictions are more than 40 years old. The existing coordinate reference system must be renovated to provide the higher accuracy and accessibility available from the Global Positioning System (GPS).

## Implementation Strategy.

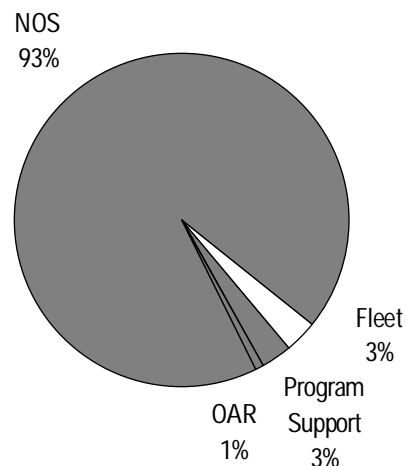
Objectives of this goal are to:

- ❖ Build, maintain and deliver a digital nautical charting database to underpin new electronic navigational systems which integrate satellite positioning, tidal heights and currents, radars and sonars, and navigational aids.
- ❖ Update nautical surveys of the Nation's coastlines and coastal oceans using full-bottom coverage technologies.
- ❖ Install measurement and communication systems to provide mariners with real-time observations and forecasts of water levels, tides and currents, and weather conditions in ports.

## Strategic Plan Objectives



## Participation by Activity



- ❖ Transform the obsolete geodetic reference frame into a GPS-based system of monumented marks and continuously operating reference stations (CORS) to support the digital revolution in mapping, charting and surveying.
- ❖ Provide modern aeronautical navigation information.

### **Benefits**

New electronic and space-based technologies promise to reduce maritime transportation risks, enhance environmental protections, and heighten the competitiveness of the shipping industry. A modernized GPS-based geodetic reference network using Federal standards will maximize the economic benefit of positioning investments. Nautical charting, coastal zone geographic information systems, precision agriculture, intelligent highway vehicle systems, and other uses of the Nation's annual investment of \$7 billion in spatial data depend upon convenient access to a GPS-based reference system.

### **FY 1996 Accomplishments**

During FY 1996, NOS:

- ❖ Produced 235 new editions of nautical charts, seven new editions of Coast Pilot volumes, and 14,682 new aeronautical charts and associated products.
- ❖ Implemented a "just-in-time" delivery system for applying new hydrographic survey data to new nautical chart editions. This reduced the data-to-chart time from years to less than 6 months.
- ❖ Acquired and processed data from 50 hydrographic surveys and two airborne laser hydrographic surveys.
- ❖ Installed a demonstration Physical Oceanographic Real Time System (PORTS) in San Francisco Bay, and evaluated a water level forecasting component of PORTS for Tampa Bay.
- ❖ Produced the 1997 U.S. Tide Tables and provided them on CD-ROM for private printing and distribution.
- ❖ Implemented an extension of the Coastal Forecast System (CFS) East Coast ocean model into the Gulf of Mexico.
- ❖ Installed 92 horizontal Federal Base Network (FNB) stations and 61 vertical FNB stations, and 47 Continuously Operating Reference Stations.
- ❖ Developed a GEOID96 model to support direct conversion between NAD83 GPS ellipsoidal heights and NAVD88 orthometric heights, allowing GPS to acquire elevations.

### **Key FY 1998 Activities**

- ❖ Complete installation of three PORTS, including Houston-Galveston, San Francisco and New York Harbor.
- ❖ Continue to reduce the backlog of hydrographic surveys and use this data to update nautical charts and the digital nautical database.
- ❖ Improve the ability to measure heights using GPS, resulting in more accurate tide measurements and enabling larger ships to pass safely into our Nation's ports.
- ❖ Continue development of the National Spatial Reference System by increasing the number of reference points in the system and bringing more GPS CORS on line.

**Key Performance Measures**

|   | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|------|------|------|------|------|
| Nautical chart suite updated (%)  | 23   | 20   | 23   | 28   | 35   |
| % critical area survey backlog reduced (43,000 SNM backlog)<br>Cumulative reduction | 2    | 6    | 9    | 12   | 16   |
| % National Water Level Observation Network modernized (cum)                         | 55   | 65   | 70   | 75   | 80   |
| % of National Spatial Reference System (cumulative complete)                        | 20   | 42   | 53   | 58   | 65   |
| Digital nautical database available   |      |      |      |      |      |
| Cumulative % raster charts  | 15   | 36   | 100  | 100  | 100  |
| Cumulative % vector charts  | N/A  | N/A  | 1    | 5    | 25   |
| % aeronautical charts/products revised on schedule                                  | 100  | 100  | 100  | 100  | 100* |

\* **Note:** The Inspectors General of the Departments of Commerce and Transportation completed a study of NOAA's Office of Aeronautical Charting and Cartography (AC&C) to make recommendations on where this function should reside. The report recommended transferring the function to the FAA. The President's FY 1998 Budget includes funding for AC&C in the FAA's budget, but proposes that this transfer be accomplished in a two stage process. In FY 1998, NOAA will perform the work on a reimbursable basis with the FAA. In FY 1999, both the funding and the FTE required for conducting the work will be fully assumed by the FAA.

| <i>Dollars in Thousands</i>          | Current Avail.<br>FY 1997 |               | FY 1998 Pres. Req. |               | Increase/Decrease |                |
|--------------------------------------|---------------------------|---------------|--------------------|---------------|-------------------|----------------|
|                                      | FTE                       | Amount        | FTE                | Amount        | FTE               | Amount         |
| <b>ACTIVITY REQUEST</b>              |                           |               |                    |               |                   |                |
| <b>Promote Safe Navigation</b>       |                           |               |                    |               |                   |                |
| National Ocean Service               | 866                       | 86,380        | 806                | 78,449        | (60)              | (7,931)        |
| Oceanic and Atmospheric Research     | 0                         | 389           | 0                  | 389           | 0                 | 0              |
| Program Support                      | 61                        | 3,117         | 61                 | 3,068         | 0                 | (49)           |
| Construction                         | 0                         | 646           | 0                  | 183           | 0                 | (463)          |
| Fleet Modernization, Shipbuilding &  | 2                         | 1,337         | 2                  | 2,601         | 0                 | 1,264          |
| <b>Total Promote Safe Navigation</b> | <b>929</b>                | <b>91,869</b> | <b>869</b>         | <b>84,690</b> | <b>(60)</b>       | <b>(7,179)</b> |

| <i>Dollars in Thousands</i>                 | Current Avail.<br>FY 1997 |               | FY 1998 Pres. Req. |               | Increase/Decrease |                |
|---|---------------------------|---------------|--------------------|---------------|-------------------|----------------|
|   | FTE                       | Amount        | FTE                | Amount        | FTE               | Amount         |
| <b>GOAL BASED</b>                           |                           |               |                    |               |                   |                |
| <b>Promote Safe Navigation</b>              |                           |               |                    |               |                   |                |
| Build Nautical Charting Database            | 106                       | 16,450        | 175                | 24,950        | 69                | 8,500          |
| Update Nautical Surveys                     | 80                        | 11,860        | 80                 | 11,775        | 0                 | (85)           |
| Provide Marine Predictions                  | 371                       | 28,213        | 371                | 23,190        | 0                 | (5,023)        |
| Establish National Spatial Reference System | 197                       | 20,167        | 197                | 19,159        | 0                 | (1,008)        |
| Provide Modern Aeronautical Charts/Products | 129                       | 10,400        | 0                  | 0             | (129)             | (10,400)       |
| Infrastructure                              | 46                        | 4,779         | 46                 | 5,616         | 0                 | 837            |
| <b>Total Promote Safe Navigation</b>        | <b>929</b>                | <b>91,869</b> | <b>869</b>         | <b>84,690</b> | <b>(60)</b>       | <b>(7,179)</b> |



# Build Sustainable Fisheries

Total Request \$331,993,000

## Vision

NOAA's vision for the next decade is to increase greatly the Nation's wealth and quality of life through sustainable fisheries that support fishing industry jobs, safe and wholesome seafood and recreational opportunities.

## Challenge

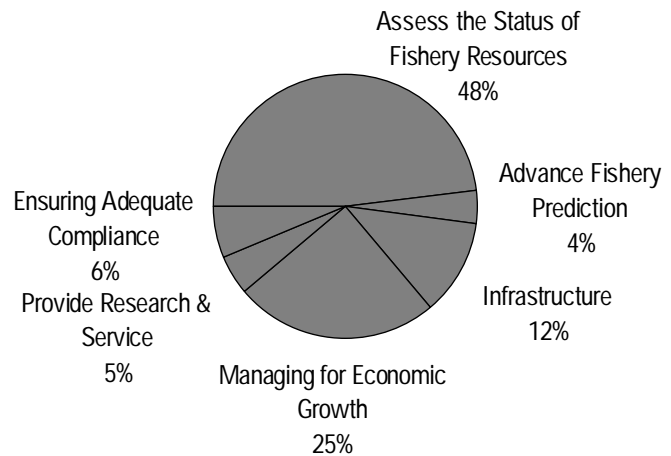
Billions of dollars in economic growth, thousands of jobs and countless recreational fishing opportunities are being wasted as a result of overfishing and overcapitalization in commercial and recreational fisheries. While many fisheries are well managed and producing positive benefits, others are severely depleted, and must be restored to realize their long-term potential. For example, fishing effort in the historically important New England groundfish fishery has been severely constrained due to the collapse of stocks. Transboundary resources can be especially vulnerable as they require international cooperation to achieve effective conservation and management. U.S. fisheries are troubled by bycatch, including juvenile and protected marine species, and by controversial allocation decisions among elements of fishing industries. Uncertainty in scientific information makes management decisions difficult.

## Implementation Strategy

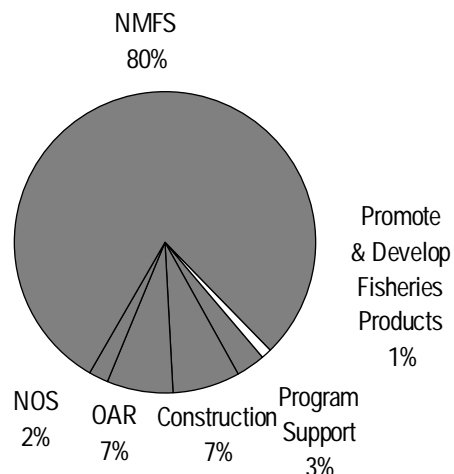
Objectives of this goal are to:

- ❖ Assess the status of fishery resources, through stock assessments and population dynamics research, to improve the scientific basis for policy decisions.
- ❖ Advance fishery predictions through research and applications.
- ❖ Manage for economic growth and sustainable fisheries by working with Fishery Management Councils, foreign nations and others to develop plans for reducing excessive fishing and capital investment.

## Strategic Plan Objectives



## Participation by Activity



- ❖ Ensure adequate and voluntary compliance with fishery regulations.
- ❖ Provide research and services for fishery-dependent industries to maximize the potential benefits from the Nation's marine resources.

### **Benefits**

Rebuilding and maintaining fisheries will promote the economic and biologic sustainability of U.S. fishing resources, and assist the commercial fishing industry in becoming more competitive internationally. NOAA estimates that restoring fisheries may add as much as \$2.9 billion in potential net value to the U.S. economy as overfished stocks recover and over-capitalization is reduced. A potential \$25 billion total impact on the national economy (direct, indirect and induced) will develop thousands of new jobs. Along with economic gains, this activity will enhance recreational opportunities, reduce our seafood trade deficit, improve the management of fisheries, and save lives by eliminating the dangerous and wasteful race for the fish.

### **FY 1996 Accomplishments**

During FY 1996, NOAA continued to make progress toward rebuilding and maintaining the health of U.S. fisheries. Most significantly, NOAA:

- ❖ Conducted numerous stock assessments, area surveys and species technical reviews to improve management decisions and fishery catch quotas.
- ❖ Reduced accidents and property loss, increased the economic value of the resource by making fresh product available for longer period, and reduced bycatch of halibut in the \$180 million Alaskan halibut/sablefish fishery by implementing controlled access measures.
- ❖ Began implementation of Amendment 7 to the Northeast Multi-species FMP to rebuild stocks and stop the decline of cod, haddock and yellowtail flounder.
- ❖ Developed a World Wide Web Data Dissemination System to allow interactive access to NOAA fishery statistics.
- ❖ Launched the Fix-It Notice Program that promotes partnership in protecting resources by giving first-time offenders an opportunity to fix minor technical problems without the threat of a penalty.
- ❖ Uncovered a massive fraud case involving a major fishing operation. Proposed penalties include permit revocations and more that \$5 million in penalties.
- ❖ Developed a Bycatch Plan to guide bycatch-related research and management for the next decade. The Plan will be available in 1997.



- ❖ Continued to support the Bering Sea Fisheries Oceanography Coordinated Investigations (FOCI) program, which now enables three-year advance predictions of pollock stocks in this \$1 billion industry.
- ❖ Initiated, through research, rapid and highly specific tests for detecting pathogenic potentially lethal bacteria in food products, including seafood.

### **Key FY 1998 Activities**

- ❖ Implement new provisions of the recently reauthorized Magnuson-Stevens Fishery Conservation and Management Act, including: developing bycatch reduction models and strategies; revising all 39 existing Fishery Management Plans to include new provisions; incorporating Essential Fish Habitat requirements; completing reports and studies; establishing advisory panels; and promulgating new regulations. The eight Regional Fishery Management Councils also face new requirements and changes in membership.
- ❖ Continue to collect resource survey data with an emphasis on stocks of unknown or uncertain status, and on high priority stocks such as New England groundfish and Alaskan pollock. Data collection will be accomplished with NOAA platforms or through charter arrangements for vessels, and through satellite remote sensing and data communication capabilities.
- ❖ Improve the prediction of long-term potential yields by applying fisheries oceanography research leading to the development of better ecosystem-based models for fisheries forecasting. Modeling efforts will be focused on high-priority regions, and some funds will be leveraged through the GLOBEC Program with the National Science Foundation. New research also will focus on the causes and potential mitigation of harmful algal blooms.
- ❖ Improve the analytical capability to predict and monitor the economic and social benefits and costs of fisheries management decisions, and support a National Academy of Sciences Study, required by the Congress, to examine the effects of Individual Transferable Quotas (ITQs) and Community Development Quotas (CDQs) in the context of fisheries management. NOAA will leverage economic analysis expertise available in several Sea Grant Universities to conduct important fisheries cost earnings surveys, and continue to implement its 10-year Fisheries Statistics Strategic Plan.
- ❖ Provide effective fisheries monitoring, surveillance and compliance with regulations, and continue to use and examine applications of satellite capabilities for fisheries enforcement purposes. NOAA will continue to develop enforcement partnerships with other Federal agencies, four states and at least five treaty tribes.
- ❖ Continue to support aquaculture research, including a joint project with Japan on flounder aquaculture.

**Key Performance Measures**

|   | 1994 | 1995 | 1996 | 1997 | 1998 |
|---|------|------|------|------|------|
| <b>% of stocks assessed (of 231 identified)</b>                                     | 71   | 74   | 74   | 75   | 75   |
| <b>% completion of information technology procurement/operations</b>                | 17   | 53   | 74   | 85   | 90   |
| <b># models/syntheses delivered for fisheries oceanography studies</b>              | -    | -    | 2    | 3    | 1    |
| <b># Fishery Management Plans with access controls implemented (of 39 FMPs)</b>     | 17   | 19   | 24   | 25   | 25   |
| <b>Northeast multispecies groundfish fishery</b>                                    |      |      |      |      |      |
| <b># of vessels removed</b>   | N/A  | N/A  | 11   | 76   | *    |
| <b># of fishing permits retired</b>   | N/A  | N/A  | 26   | 180  | *    |
| <b>Northwest salmon fishery</b>   |      |      |      |      |      |
| <b># of fleets using vessel monitoring systems for spatial/temporal regulations</b> | N/A  | 1    | 3    | 3    | 3    |

\* **Note:** No funds requested in FY 1998 for vessel and permit buyouts and direct economic assistance to fishermen.

| <i>Dollars in Thousands</i>              | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |              |
|--|---------------------------|----------------|--------------------|----------------|-------------------|--------------|
|  | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount       |
| <b>ACTIVITY REQUEST</b>                  |                           |                |                    |                |                   |              |
| <b>Build Sustainable Fisheries</b>       |                           |                |                    |                |                   |              |
| National Ocean Service                   | 14                        | 7,350          | 14                 | 7,350          | 0                 | 0            |
| National Marine Fisheries Service        | 1,942                     | 248,728        | 1,954              | 256,289        | 12                | 7,561        |
| Oceanic and Atmospheric Research         | 10                        | 27,682         | 10                 | 23,498         | 0                 | (4,184)      |
| Program Support                          | 196                       | 10,759         | 196                | 10,921         | 0                 | 162          |
| Construction                             | 10                        | 26,099         | 10                 | 23,033         | 0                 | (3,066)      |
| Fleet Modernization, Shipbuilding &      | 15                        | 4,278          | 10                 | 5,522          | (5)               | 1,244        |
| Fishing Vessel Obligation Guarantee      | 0                         | 250            | 0                  | 238            | 0                 | (12)         |
| Promote and Develop Fisheries Products   | 4                         | 381            | 4                  | 4,000          | 0                 | 3,619        |
| Fishing Vessel and Gear Damage Fund      | 2                         | 200            | 0                  | 0              | (2)               | (200)        |
| Fishermen's Contingency Fund             | 2                         | 1,000          | 2                  | 953            | 0                 | (47)         |
| Foreign Fishing Observer Fund            | 0                         | 196            | 0                  | 189            | 0                 | (7)          |
| <b>Total Build Sustainable Fisheries</b> | <b>2,195</b>              | <b>326,923</b> | <b>2,200</b>       | <b>331,993</b> | <b>5</b>          | <b>5,070</b> |

| <i>Dollars in Thousands</i>              | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |              |
|--|---------------------------|----------------|--------------------|----------------|-------------------|--------------|
|  | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount       |
| <b>GOAL BASED</b>                        |                           |                |                    |                |                   |              |
| <b>Build Sustainable Fisheries</b>       |                           |                |                    |                |                   |              |
| Assess the Status of Fishery Resources   | 1,358                     | 164,687        | 1,358              | 160,241        | 0                 | (4,446)      |
| Advance Fishery Prediction               | 16                        | 14,012         | 16                 | 12,890         | 0                 | (1,122)      |
| Managing for Economic Growth             | 382                       | 73,972         | 392                | 84,620         | 10                | 10,648       |
| Ensuring Adequate Compliance             | 171                       | 16,500         | 171                | 18,200         | 0                 | 1,700        |
| Provide Research and Service             | 47                        | 15,811         | 47                 | 15,761         | 0                 | (50)         |
| Infrastructure                           | 221                       | 41,941         | 216                | 40,281         | (5)               | (1,660)      |
| <b>Total Build Sustainable Fisheries</b> | <b>2,195</b>              | <b>326,923</b> | <b>2,200</b>       | <b>331,993</b> | <b>5</b>          | <b>5,070</b> |



# Recover Protected Species

Total Request \$69,719,000

## Vision

NOAA's vision is to conserve marine species and to recover those in danger of extinction. By 2005, NOAA will be on the road to recovering every marine species at risk and maintaining the healthy marine ecosystems upon which they depend.

## Challenge

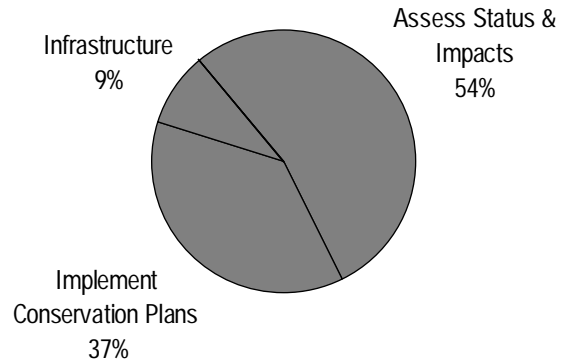
Marine resources contribute billions of dollars to the Nation's economy. However, many commercial and recreational activities contribute to stress on marine species. Many populations of marine organisms are depleted or declining due to human activity in marine ecosystems or to unknown causes. For example, west coast salmon and steelhead populations are at risk due to a combination of factors including habitat loss and commercial overexploitation. Despite protective measures, fishing-related mortality continues to threaten whales and marine turtles in U.S. waters. Several seal and sea lion populations in Alaska are declining rapidly, and the causes are uncertain. While many recovery plans have been developed, none have been implemented fully and plans still are needed for many species. The desired outcome is to recover protected species in danger of extinction in a manner compatible with the sustainable use of marine resources.

## Implementation Strategy

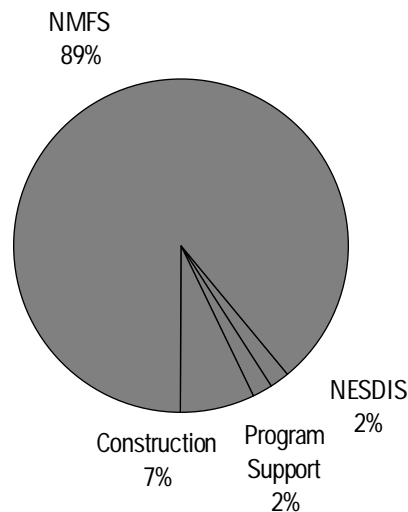
Objectives of this goal are to:

- ❖ Assess the status of, and impacts to, protected species. Information is needed to better focus management actions, limit the scope of restrictions, and promote the recovery of all protected species.
- ❖ Develop and implement conservation and recovery plans for depleted marine mammals and endangered and threatened species. This will be done in part through developing new partnerships with state and private sectors. Technologies and measures will be developed to reduce or avoid detrimental interactions between marine species and human activities.

Strategic Plan Objectives



Participation by Activity



## **Benefits**

Through conservation of the Nation's living marine resources, NOAA will enhance economic and cultural opportunities for future generations. The existence of the Marine Mammal Protection Act, the Endangered Species Act and other legislation provides a clear indication of public support for strong efforts to conserve living marine resources. This effort will enable the preservation of marine biodiversity by balancing the utilization of natural resources with the management of protected species. Recovering species, and avoiding the further decline of others, will contribute to the overall health and understanding of marine ecosystems. Improved science will lead to better long-term management and conservation strategies.

## **FY 1996 Accomplishments**

NOAA, working with partner agencies and affected parties, has continued to design and implement measures to improve the status of endangered species during FY 1996. NOAA has addressed high-profile issues associated with the northern right whale, incidental take of marine mammals in commercial fisheries, protection of Kemp's ridley sea turtles, and listing of Pacific salmonids. Most significantly, NOAA:

- ❖ Established an expert working group to provide advice on the effectiveness of conservation measures for Kemp's ridley sea turtles at sea and on the nesting beach. As a result of recommendations in FY 1996, NOAA is strengthening TED requirements, and has increased cooperation with Mexico for TED uses and to maximize hatchling production of wild turtles on the nesting beach.
- ❖ Initiated four marine mammal take reduction plans, which will be finalized during 1997, to improve the conservation of marine mammals in the Atlantic and Pacific oceans.
- ❖ Convened a Science Advisory Panel to review and advise on Snake River salmon recovery actions, and conducted hundreds of ESA Section 7 and 10 consultations to ensure proposed actions do not further jeopardize salmon survival.
- ❖ Established a cooperative conservation program agreement under ESA Section 6 with the Commonwealth of Massachusetts.
- ❖ Completed status reviews for salmon stocks and updated 50 marine mammal strategic stocks assessments.
- ❖ Provided specialized support, with the Navy and the states of Georgia and Florida, to reduce ship strikes and fisheries mortality on highly endangered Atlantic right whales.

**Key FY 1998 Activities:**

- ❖ Accelerate habitat conservation planning for at-risk salmon stocks and expand support for state conservation programs to protect Pacific salmon in California, Oregon and Washington.
- ❖ Undertake actions required to address increased responsibilities and workload associated with harvest, hatcheries, habitat and hydropower activities in response to additional salmon and steelhead listings along the West Coast.
- ❖ Increase involvement in and complete more Habitat Conservation Plans in response to Administration and landowner interest in cooperatively addressing salmon habitat conservation; improve state/Federal cooperation through technical and policy support in state conservation programs; and assist Federal interagency efforts to take an ecosystem approach to multispecies management to better address threats to salmonids.
- ❖ Expand recovery actions for endangered Kemp's Ridley turtles by increasing protection at the nesting beach in Mexico and in U.S. waters.
- ❖ Strengthen the Atlantic right whale recovery program by providing adequate warnings to prevent ship strikes and long-term monitoring to determine habitat use and migratory pathways.
- ❖ Restore the highly endangered Hawaiian monk seal to former rookeries on Midway Island.
- ❖ Establish cooperative conservation program agreements under ESA Section 6 with additional states, including Alaska, California and Washington.

**Key Performance  
Measures**

|  | 1994 | 1995 | 1996 | 1997 | 1998 |
|--|------|------|------|------|------|
| # recovery plans developed   | 9    | 11   | 13   | 23   | 25   |
| # recovery plans priority activities implemented (annual)                | 0    | 8    | 8    | 8    | 8    |
| # species with population status improved (annual)                       | 3    | 4    | 11   | 12   | 16   |
| # species status reviews used to evaluate conservation programs (annual) | 2    | 3    | 3    | 11   | 7    |
| # investigations on hortality of protected species (annual)              | 8    | 9    | 11   | 7    | 10   |
| # cooperative conservation programs implemented (cum)                    | 0    | 3    | 4    | 8    | 10   |



| <i>Dollars in Thousands</i>                                  | Current Avail.<br>FY 1997 |               | FY 1998 Pres. Req. |               | Increase/Decrease |              |
|--|---------------------------|---------------|--------------------|---------------|-------------------|--------------|
|  | FTE                       | Amount        | FTE                | Amount        | FTE               | Amount       |
| <b>ACTIVITY REQUEST</b>                                      |                           |               |                    |               |                   |              |
| <b>Recover Protected Species</b>                             |                           |               |                    |               |                   |              |
| National Marine Fisheries Service                            | 365                       | 54,728        | 410                | 62,325        | 45                | 7,597        |
| Oceanic and Atmospheric Research                             | 0                         | 340           | 0                  | 340           | 0                 | 0            |
| National Environmental Satellite, Data & Information Service | 0                         | 1,202         | 0                  | 1,202         | 0                 | 0            |
| Program Support  | 21                        | 1,227         | 21                 | 1,245         | 0                 | 18           |
| Construction   | 1                         | 5,202         | 1                  | 4,607         | 0                 | (595)        |
| <b>Total Recover Protected Species</b>                       | <b>387</b>                | <b>62,699</b> | <b>432</b>         | <b>69,719</b> | <b>45</b>         | <b>7,020</b> |

| <i>Dollars in Thousands</i>            | Current Avail.<br>FY 1997 |               | FY 1998 Pres. Req. |               | Increase/Decrease |              |
|--|---------------------------|---------------|--------------------|---------------|-------------------|--------------|
|  | FTE                       | Amount        | FTE                | Amount        | FTE               | Amount       |
| <b>GOAL BASED</b>                      |                           |               |                    |               |                   |              |
| <b>Recover Protected Species</b>       |                           |               |                    |               |                   |              |
| Assess Status and Impacts              | 347                       | 37,550        | 347                | 37,777        | 0                 | 227          |
| Implement Conservation Plans           | 18                        | 18,380        | 63                 | 25,750        | 45                | 7,370        |
| Infrastructure                         | 22                        | 6,769         | 22                 | 6,192         | 0                 | (577)        |
| <b>Total Recover Protected Species</b> | <b>387</b>                | <b>62,699</b> | <b>432</b>         | <b>69,719</b> | <b>45</b>         | <b>7,020</b> |



# Sustain Healthy Coasts

Total Request \$212,241,000

## Vision

By 2005, the Nation's coasts will have more productive and diverse habitats for fish and wildlife, and cleaner coastal waters for recreation and the production of seafood. Coastal communities will have thriving, sustainable economies based on well-planned development and healthy coastal ecosystems.

## Challenge

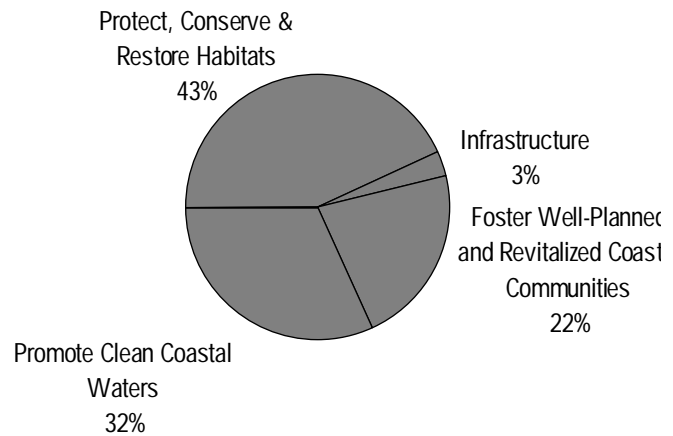
Over half of the U.S. population lives on the 10 percent of land area defined as coastal. Between one-third and one-half of U.S. jobs are located in coastal areas, and one-third of the Nation's gross national product is produced there. Coastal areas provide essential habitats for the majority of commercially valuable marine species. Despite significant progress to develop the technology, information and management systems that foster sustainable economies and conservation of coastal resources, rapid population growth and increasing demands for recreation and economic development in many coastal areas have degraded natural resources and led to declines in both environmental integrity and general productivity. The closure of beaches and harvesting areas is evidence that declines in the health of coastal environments threaten businesses and human health. Maintaining the health, productivity and biodiversity of coastal ecosystems is essential to the sustainable development of coastal economies and the future welfare of the Nation.

## Implementation Strategy

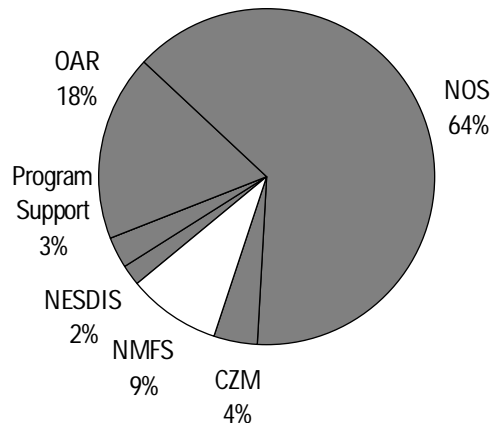
Objectives of this goal are to:

- ❖ Protect, conserve and restore coastal habitats and their biodiversity.
- ❖ Promote clean coastal waters to sustain living marine resources and ensure safe recreation, healthy seafood and economic vitality.
- ❖ Foster well-planned and revitalized coastal communities that sustain coastal economies, are

## Strategic Plan Objectives



## Participation by Activity



compatible with the natural environment, minimize the risks from natural hazards, and provide access to coastal resources for the public's use and enjoyment.

### **Benefits**

Improved understanding of the way coastal ecosystems function, coupled with an ability to predict responses of ecosystems to human activities and take appropriate action, are keys to an approach that ensures that the Nation's coastal ecosystems are managed for long-term benefit. This goal addresses the practical needs and concerns of resource managers, as well as strengthening the watershed and regional management frameworks provided by Federal-state partnerships such as the CZM program. An integrated program of monitoring, research, assessments, restoration, information dissemination, and resource management will provide the basis for the sustainable development of our coasts.

### **FY 1996 Accomplishments**

During FY 1996, NOAA:

- ❖ Unveiled the Final Management Plan for the Florida Keys National Marine Sanctuary.
- ❖ Provided technical and scientific assistance to the Coast Guard at 70 oil and chemical spills, including major spills off Rhode Island, Galveston, Honolulu and Portland, Me.
- ❖ Increased the pace of coastal habitat restoration, with 50 projects benefiting 40,000 acres, in partnership with Federal, state and local agencies, industry and non-governmental organizations.
- ❖ Completed the first strategic plan for NOAA's National Habitat Program, which sets the course for habitat protection, restoration, research and outreach for the next five years.
- ❖ Provided hardware at CoastWatch Nodes for ocean color products from the ADEOS/OCTS satellite, supporting improved fisheries management, hazard mitigation, and water quality management.
- ❖ Created a national policy on gravel mining, with emphasis on effects of riverbed extraction on Pacific salmon.
- ❖ Reviewed and sent, with the EPA, conditional approval findings to 27 of 29 states on Coastal Non-point Programs.
- ❖ Completed the first Nation-wide assessment of the spatial extent of toxic contaminants in sediments and bivalves in coastal waters. Survey data show high levels of toxics are found primarily near urban centers in estuarine areas and other coastal waters with restricted circulation.

- ❖ Documented the magnitude and extent of contaminants in heavily contaminated Boston Harbor.
- ❖ Developed databases and prepared graphical displays to relate information on natural resources, sediment contaminants and contamination sources and potential restoration projects for three watersheds (Newark Bay, San Francisco Bay, and Christina River).
- ❖ Initiated the San Francisco Bay Project to integrate its ecosystem management, natural hazards mitigation, and marine transportation activities.

**Key FY 1998 Activities:**

- ❖ South Florida Ecosystem Restoration Initiative: In FY 1998, NOAA will: 1) provide integrated coastal monitoring in Florida Bay and the Florida Keys National Marine Sanctuary; 2) continue to restore South Florida's living marine resources and coral reefs; and 3) determine causes of declines and effects of human actions on coastal resources.
- ❖ Clean Water Initiative: This Presidential environmental initiative is aimed at protecting communities from toxic pollution. NOAA is an important participant in the three year (1998-2000) Clean Water Initiative to: 1) make information more accessible to local communities about toxins in water; and 2) work with state and local governments to reduce the flow of toxic pollutants to Great Lakes and other coastal waters. NOAA's previous work on water quality issues with coastal states has produced strategies and programs that this Initiative will implement to keep coastal communities informed and decrease inputs of toxic pollutant runoff into coastal waters.
- ❖ Essential Fish Habitat: NOAA has new responsibilities under the Magnuson-Stevens Act of 1996 for identifying essential fish habitat and adding essential habitat elements into fishery management plans. These new responsibilities will require significant resources and attention in FY 1998.
- ❖ West Coast Salmon and Steelhead: NOAA will accelerate its participation in habitat watershed planning and management as an essential component of the overall recovery effort for salmon and steelhead species, and in fulfillment of responsibilities under the National Habitat Plan. The development of habitat conservation plans and the increase in Federal Energy Regulatory Commission relicensings on the West coast also will affect the recovery of these newly listed species.
- ❖ Marine and Coastal Protected Areas: NOAA will implement new management plans in the Florida Keys National Marine Sanctuary (NMS) and the Hawaii Humpback Whale NMS. In addition, new National Estuarine Research Reserve designations are expected in FY 1998.

**Key Performance Measures**

|   | 1994 | 1995 | 1996 | 1997  | 1998  |
|---|------|------|------|-------|-------|
| <b>Protection/restoration of coastal habitats:</b>                              |      |      |      |       |       |
| # Acres restored (cum)  | 2500 | 4000 | 7000 | 11000 | 26000 |
| # Acres restored (indiv)  | 2500 | 1500 | 3000 | 8000  | 15000 |
| # Damage cases settled  | 13   | 6    | 3    | 2     | 2     |
| # Comprehensive project reviews (cum)   | 1700 | 1500 | 1500 | 1500  | 1500  |
| # Interagency agreement projects to restore coastal habitat (cum)               | 4    | 5    | 9    | 16    | 20    |
| <b>% Resource protection systems completed:</b>                                 |      |      |      |       |       |
| Nat'l Marine Sanctuary System   | 29   | 29   | 29   | 29    | 29    |
| Nat'l Estuarine Research Reserve System   | 59   | 59   | 59   | 62    | 67    |
| State Coastal Nonpoint Prgms  | 0    | 0    | 48   | 83    | 83    |
| State Coastal Zone Mgt Prgms  | 83   | 83   | 83   | 89    | 94    |
| <b>% Fishery management plans with improved habitat elements:</b>               |      |      |      |       |       |
|   | 0    | 0    | 0    | 8     | 20    |
| <b>% Coastal ecosystems with inventories, databases, and assessments for:</b>   |      |      |      |       |       |
| Reducing risks from hazardous chemicals   | 2    | 5    | 10   | 15    | 20    |
| Characterizing the status of resources for the Nation's estuarine resource base | 10   | 12   | 18   | 20    | 23    |
| <b>% Coastal ecosystems with:</b>   |      |      |      |       |       |
| Toxic chemical levels and effects assessed                                      | 5    | 8    | 15   | 20    | 24    |
| Improved health indices   | 0    | 0.5  | 1    | 2     | 3     |
| <b># Tools improved and applied:</b>  |      |      |      |       |       |
| Risk assessment   | 0    | 1    | 1    | 0     | 0     |
| Monitoring and assessment   | 2    | 2    | 2    | 2     | 2     |
| Satellite-derived products  | 128K | 172K | 178K | 175K  | 185K  |
| Regional assessments with ecosystem models                                      | 0    | 4    | 1    | 2     | 0     |

| <i>Dollars in Thousands</i>                                  | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |               |
|--|---------------------------|----------------|--------------------|----------------|-------------------|---------------|
|  | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount        |
| <b>ACTIVITY REQUEST</b>                                      |                           |                |                    |                |                   |               |
| <b>Sustain Healthy Coasts</b>                                |                           |                |                    |                |                   |               |
| National Ocean Service                                       | 359                       | 109,546        | 359                | 136,087        | 0                 | 26,541        |
| National Marine Fisheries Service                            | 219                       | 18,240         | 219                | 19,650         | 0                 | 1,410         |
| Oceanic and Atmospheric Research                             | 44                        | 44,801         | 44                 | 37,680         | 0                 | (7,121)       |
| National Environmental Satellite, Data & Information Service | 0                         | 5,121          | 0                  | 4,921          | 0                 | (200)         |
| Program Support  | 97                        | 5,417          | 97                 | 5,498          | 0                 | 81            |
| Construction   | 0                         | 2,624          | 0                  | 605            | 0                 | (2,019)       |
| Coastal Zone Management Fund                                 | 49                        | 7,800          | 49                 | 7,800          | 0                 | 0             |
| <b>Total Sustain Healthy Coasts</b>                          | <b>768</b>                | <b>193,549</b> | <b>768</b>         | <b>212,241</b> | <b>0</b>          | <b>18,692</b> |

| <i>Dollars in Thousands</i>                             | Current Avail.<br>FY 1997 |                | FY 1998 Pres. Req. |                | Increase/Decrease |               |
|---|---------------------------|----------------|--------------------|----------------|-------------------|---------------|
|   | FTE                       | Amount         | FTE                | Amount         | FTE               | Amount        |
| <b>GOAL BASED</b>                                       |                           |                |                    |                |                   |               |
| <b>Sustain Healthy Coasts</b>                           |                           |                |                    |                |                   |               |
| Protect, conserve and restore habitats                  | 335                       | 86,140         | 335                | 90,985         | 0                 | 4,845         |
| Promote clean coastal waters                            | 306                       | 50,048         | 306                | 67,238         | 0                 | 17,190        |
| Foster well-planned and revitalized coastal communities | 30                        | 48,515         | 30                 | 47,110         | 0                 | (1,405)       |
| Infrastructure  | 97                        | 8,846          | 97                 | 6,908          | 0                 | (1,938)       |
| <b>Total Sustain Healthy Coasts</b>                     | <b>768</b>                | <b>193,549</b> | <b>768</b>         | <b>212,241</b> | <b>0</b>          | <b>18,692</b> |







# APPENDIX

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# Appropriation Summary for FY 1998

(Dollars in thousands)

| FEDERAL FUNDS:<br><u>Appropriation:</u>                | 1996             | 1997             | 1998<br>Estimate | Increase/<br>Decrease |
|--|------------------|------------------|------------------|-----------------------|
| Operations, Research, and Facilities (ORF)             | \$1,793,784      | \$1,831,067      | \$1,473,245      | (\$ 357,822)          |
| Capital Assets Acquisition                             |                  |                  | 503,464          | 503,464               |
| Fleet Modernization, Shipbuilding & Conversion         | 8,000            | 8,000            |                  | (8,000)               |
| Construction   | 57,500           | 58,250           | 0                | (58,250)              |
| GOES Contingency Fund                                  | 0                | 0                | 0                | 0                     |
| Fishing Vessel & Gear Damage Comp Fund                 | 216              | 200              | 0                | (200)                 |
| Fisherman's Contingency Fund                           | 66               | 1,000            | 953              | (47)                  |
| Foreign Fishing Observer Fund                          | 58               | 196              | 189              | (7)                   |
| Fishery Finance  | 250              | 250              | 238              | (12)                  |
| <b>TOTAL APPROPRIATION</b>                             | <b>1,859,874</b> | <b>1,898,963</b> | <b>1,978,089</b> | <b>79,126</b>         |
| Coastal Zone Management Fund                           |                  |                  |                  |                       |
| Discretionary spending authority from<br>collections   | 7,418            | 7,800            | 7,800            | 0                     |
| Mandatory offsetting collections                       | (4,994)          | (4,400)          | (4,736)          | (336)                 |
|  | 2,424            | 3,400            | 3,064            | (336)                 |
| TRANSFERS  |                  |                  |                  |                       |
| Operations , Research, & Facilities                    |                  |                  |                  |                       |
| FROM:  |                  |                  |                  |                       |
| Promote & Develop Fishery Products                     | 63,000           | 66,000           | 62,381           | (3,619)               |
| Damage Assessment & Restor.Revolving                   | 3,232            | 5,500            | 5,200            | (300)                 |
| TO:Bureau of Export Administration                     | (325)            | 0                | 0                | 0                     |
| Subtotal, ORF  | 65,907           | 71,500           | 67,581           | (3,919)               |
| Promote & Develop Fishery Products (P&D)               |                  |                  |                  |                       |
| TO:ORF   | (63,000)         | (66,000)         | (62,381)         | 3,619                 |
| FROM:Department of Agriculture                         | 72,893           | 66,381           | 66,381           | 0                     |
| Subtotal, P&D  | 9,893            | 381              | 4,000            | 3,619                 |
| Damage Assessment & Restoration Revolving Fund (DARRF) |                  |                  |                  |                       |
| TO:ORF   | (3,232)          | (5,500)          | (5,200)          | 300                   |
| FROM:Department of Interior                            | 539              | 4,000            | 3,700            | (300)                 |
| Subtotal, DARRF  | (2,693)          | (1,500)          | (1,500)          | 0                     |
| <b>TOTAL, TRANSFERS</b>                                | <b>73,107</b>    | <b>70,381</b>    | <b>70,081</b>    | <b>(300)</b>          |
| Federal Ship Financing Fund                            | 22,000           | 0                | 0                | 0                     |
| <b>TOTAL BUDGET AUTHORITY (All funds)</b>              | <b>1,957,405</b> | <b>1,972,744</b> | <b>2,051,234</b> | <b>78,490</b>         |
| Mandatory Funds  | (89,899)         | (61,981)         | (61,645)         | 336                   |
| <b>DISCRETIONARY BUDGET AUTHORITY</b>                  |                  | <b>1,910,763</b> | <b>1,989,589</b> | <b>78,826</b>         |

Increases and Decreases  
(Dollars in thousands)

|  | FY 1997<br>Currently<br>Available | FY 1998<br>Decrease | FY 1998<br>Increase |
|--|-----------------------------------|---------------------|---------------------|
| <b>NATIONAL OCEAN SERVICE</b>                        |                                   |                     |                     |
| <b>Navigation Services</b>                           |                                   |                     |                     |
| Mapping and Charting                                 | \$38,000                          |                     |                     |
| Transfer to Offset DMA Funds                         |                                   |                     | \$12,581            |
| Aeronautical Charting Transfer to FAA                |                                   | (\$ 14,481)         |                     |
| <b>Geodesy</b>                                       |                                   |                     |                     |
| Reduce Number of GPS CORS                            | 1,000                             | (508)               |                     |
| South Carolina National Height System Demonstration  | 500                               | (500)               |                     |
| Tide and Current Data - National Coastal Data Center | 12,500                            | (1,500)             |                     |
| <b>Ocean Resources Conservation and Assessment</b>   |                                   |                     |                     |
| <b>Estuarine and Coastal Assessment</b>              |                                   |                     |                     |
| <b>Ocean Assessment Program</b>                      |                                   |                     |                     |
| Water Quality Monitoring                             |                                   |                     | 3,925               |
| South Florida Ecosystem Monitoring                   |                                   |                     | 1,900               |
| NOAA Coastal Services Center                         | 12,000                            | (2,000)             |                     |
| Great Bay National Estuarine Research Reserve        | 2,700                             | (2,700)             |                     |
| Damage Assessment and Restoration Program            | 2,200                             |                     | 800                 |
| Transfer from Damage Assessment Fund                 | 7,000                             | (300)               |                     |
| Ocean Services                                       | 2,500                             |                     | 300                 |
| <b>Coastal Ocean Science</b>                         |                                   |                     |                     |
| <b>Coastal Ocean Program</b>                         |                                   |                     |                     |
| South Florida Ecosystem Restoration                  | 1,300                             |                     | 600                 |
| National Harmful Algal Bloom Program                 | 1,000                             | (600)               |                     |
| <b>Ocean and Coastal Management</b>                  |                                   |                     |                     |
| <b>Coastal Management</b>                            |                                   |                     |                     |
| <b>CZM Grants</b>                                    |                                   |                     |                     |
| Clean Water Initiative                               |                                   |                     | 18,000              |
| New States/Coastal Hazards                           | 46,200                            |                     | 1,532               |
| National Estuarine Research Reserve                  | 1,300                             |                     | 3,000               |
| Nonpoint Source Pollution Control Program            |                                   |                     | 1,000               |
| <b>Ocean Management</b>                              |                                   |                     |                     |
| Marine Sanctuary program                             | 11,685                            |                     | 1,515               |
| Acquisition of Data                                  | 18,200                            | (3,654)             |                     |
| <b>Total NOS Changes</b>                             |                                   | (26,243)            | 45,153              |

Total NOS Request: 224,836

(Dollars in thousands)

|   | FY 1997<br>Currently<br>Available | FY 1998<br>Decrease | FY 1998<br>Increase |
|---|-----------------------------------|---------------------|---------------------|
| <b>NATIONAL MARINE FISHERIES SERVICE</b>        |                                   |                     |                     |
| <b>Information Collection &amp; Analyses</b>    |                                   |                     |                     |
| Resource Information                            | 91,330                            |                     | 1,662               |
| Chesapeake Bay Studies                          | 1,890                             | (390)               |                     |
| Right Whale Research                            | 250                               | (50)                |                     |
| Hawaii Stock Management Plan                    | 500                               | (500)               |                     |
| Stellar Sea Lion Recovery Plan                  | 1,770                             | (330)               |                     |
| Bluefish/Striped Bass                           | 785                               | (785)               |                     |
| Gulf of Mexico Mariculture                      | 300                               | (300)               |                     |
| <b>Fishery Industry Information</b>             |                                   |                     |                     |
| Fish Statistics                                 | 13,000                            |                     | 400                 |
| Recreational Fishery Monitoring                 | 3,400                             | (300)               |                     |
| <b>Information Analyses &amp; Dissemination</b> |                                   |                     |                     |
|   | 20,900                            |                     | 300                 |
| <b>Conservation and Management Operations</b>   |                                   |                     |                     |
| <b>Fisheries Management Programs</b>            |                                   |                     |                     |
| Magnuson-Stevens Implementation                 | 20,300                            |                     |                     |
| Administrative Costs for Loans                  | 7,300                             |                     |                     |
| Columbia River Hatcheries                       | 1,700                             |                     |                     |
| Regional Councils                               | 10,955                            | (655)               |                     |
| International Fisheries Commissions             | 10,200                            |                     | 1,500               |
| Pacific tuna management                         | 950                               | (550)               |                     |
|   | 1,900                             | (400)               |                     |
| <b>Protected Species Management</b>             |                                   |                     |                     |
| Marine Mammal Protection Act                    | 5,700                             |                     | 1,050               |
| Endangered Species Act Recovery Plan            | 9,125                             |                     | 375                 |
| Fishery Observer Training                       | 13,500                            |                     | 6,700               |
|   | 417                               | (417)               |                     |
| <b>Habitat Conservation</b>                     |                                   |                     |                     |
|   | 8,000                             |                     | 1,800               |
| <b>Enforcement &amp; Surveillance</b>           |                                   |                     |                     |
|   | 16,500                            |                     | 1,700               |
| <b>State and Industry Assistance Programs</b>   |                                   |                     |                     |
| <b>Grants to States</b>                         |                                   |                     |                     |
| Anadromous Fishery Project                      |                                   | 250                 |                     |
| Interstate Fish Commissions                     | 5,000                             | (1,000)             |                     |
| <b>Fisheries Development Program</b>            |                                   |                     |                     |
| Hawaiian Fisheries Development                  | 750                               | (750)               |                     |
| <b>Acquisition of Data</b>                      |                                   |                     |                     |
|   | 26,840                            | (1,742)             |                     |
| <b>Total NMFS Changes</b>                       |                                   | (8,169)             | 24,737              |
| Total NMFS Request: 338,264                     |                                   |                     |                     |

(Dollars in thousands)

|  | FY 1997<br>Currently<br>Available | FY 1998<br>Decrease | FY 1998<br>Increase |
|--|-----------------------------------|---------------------|---------------------|
| <b>OCEANIC AND ATMOSPHERIC RESEARCH</b>  |                                   |                     |                     |
| Climate and Air Quality Research:  |                                   |                     |                     |
| Interannual & Seasonal Climate Research<br>[Requested in Climate and Global Change]                      | 68,000                            | [-60,000]           | 4,900               |
| Long-Term Climate & Air Quality Research   | 27,272                            |                     |                     |
| Health of the Atmosphere Program   | 3,034                             |                     | 1,030               |
| High Performance Computing   | 7,500                             |                     |                     |
| Climate and Global Change<br><i>[Included in Interannual &amp; Seasonal Climate Research in FY 1997]</i> |                                   |                     | 2,000<br>[+60,000]  |
| GLOBE  | 6,000                             |                     | 1,000               |
| Atmospheric Programs   |                                   |                     |                     |
| Weather Research   | 37,963                            |                     |                     |
| 0  |                                   |                     |                     |
| Ocean and Great Lakes Programs   |                                   |                     |                     |
| Marine Prediction Research   |                                   |                     |                     |
| Lake Champlain Study   | 150                               | (150)               |                     |
| Arctic Research Initiative   | 1,000                             | (1,000)             |                     |
| Tsunami Mapping Center   | 2,375                             | (2,375)             |                     |
| Sea Grant  |                                   |                     |                     |
| Sea Grant College Program  | 0                                 | 0                   |                     |
| Zebra Mussel Research, Oyster Disease Research,<br>and National Coastal R&D Institute                    | 4,118                             | (4,118)             |                     |
| Undersea Research Program  | 0                                 | 0                   |                     |
| NOAA Undersea Research Program   | 12,000                            | (6,600)             |                     |
| Acquisition of Data  | 12,690                            |                     | 194                 |
| <b>Total OAR Changes</b>   |                                   | (14,243)            | 9,124               |

Total OAR Request: 248,050

(Dollars in thousands)

|                                       | FY 1997<br>Currently<br>Available | FY 1998<br>Decrease | FY 1998<br>Increase |
|---------------------------------------|-----------------------------------|---------------------|---------------------|
| <b>NATIONAL WEATHER SERVICE</b>       |                                   |                     |                     |
| Operations and Research               |                                   |                     |                     |
| Local Warnings and Forecasts          | 298,538                           |                     |                     |
| Infrastructure Maintenance            |                                   |                     | 9,462               |
| MARDI                                 | 91,462                            | (17,788)            |                     |
| Radiosonde Replacement                | 1,500                             | (590)               |                     |
| Susquehanna River Basin Flood Sys.    | 1,000                             | (381)               |                     |
| Regional Climate Centers              | 2,000                             | (2,000)             |                     |
| Central Forecast Guidance             | 28,700                            |                     | 843                 |
| Atmospheric and Hydrological Research | 2,000                             |                     | 489                 |
| Systems Acquisition                   |                                   |                     |                     |
| Public Warning and Forecast Systems   |                                   |                     |                     |
| NEXRAD                                | 53,145                            | (2,177)             |                     |
| [NEXRAD (ORF)]                        |                                   | [-13,554]           |                     |
| [NEXRAD (CAA)]                        |                                   |                     | [+11,377]           |
| ASOS                                  | 10,056                            | (221)               |                     |
| [ASOS (ORF)]                          |                                   | [-4,715]            |                     |
| [ASOS (CAA)]                          |                                   |                     | [+4,494]            |
| AWIPS/NOAAPort                        | 100,000                           |                     | 16,910              |
| [AWIPS (ORF)]                         |                                   | [-100,000]          |                     |
| [AWIPS (CAA)]                         |                                   |                     | [+116,910]          |
| Computer Facility Upgrades            | 14,000                            | (90)                |                     |
| [Computer Facility Upgrades (ORF)]    |                                   | [-6,000]            |                     |
| [Computer Facility Upgrades (CAA)]    |                                   |                     | [+5,910]            |
| <b>Total NWS Changes</b>              |                                   | (23,247)            | 27,704              |
| Total NWS Request: 642,454            |                                   |                     |                     |

(Dollars in thousands)

|  | FY 1997<br>Currently<br>Available | FY 1998<br>Decrease | FY 1998<br>Increase |
|--|-----------------------------------|---------------------|---------------------|
| <b>NATIONAL ENVIRONMENTAL SATELLITE,<br/>DATA, AND INFORMATION SERVICE</b> |                                   |                     |                     |
| Satellite Observing Systems  |                                   |                     |                     |
| Polar Spacecraft and Launching   | 147,300                           | (64,395)            |                     |
| [Polar Spacecraft and Launching (ORF)]                                     |                                   | [-147,300]          |                     |
| [Polar Spacecraft and Launching (CAA)]                                     |                                   |                     | [+82,905]           |
| Polar Convergence/IPO  | 29,000                            |                     | 22,503              |
| Geostationary Spacecraft and Launching                                     | 171,480                           |                     | 66,193              |
| [Geostationary Spacecraft and Launching (ORF)]                             |                                   | [-171,480]          |                     |
| [Geostationary Spacecraft and Launching (CAA)]                             |                                   |                     | [+237,673]          |
| Ocean Remote Sensing   | 4,000                             | (200)               |                     |
| Environmental Observing Services   | 51,000                            | (653)               |                     |
| Environmental Data Management Systems                                      |                                   |                     |                     |
| Data and Information Services  | 30,002                            | (2,502)             |                     |
| Environmental Data Systems Modernization                                   | 14,800                            |                     | 1,535               |
| <b>Total NESDIS Changes</b>  |                                   | (67,750)            | 90,231              |

Total NESDIS Request: 470,063

(Dollars in thousands)

|   | FY 1997<br>Currently<br>Available | FY 1998<br>Decrease | FY 1998<br>Increase |
|---|-----------------------------------|---------------------|---------------------|
| <b>PROGRAM SUPPORT</b>                        |                                   |                     |                     |
| Administration and Services                   |                                   |                     |                     |
| Executive Direction and Administration        | 19,200                            |                     | 711                 |
| Central Administrative Support                | 33,000                            | (1,150)             |                     |
| Retired Pay/Benefits to Commissioned Officers | 8,000                             |                     | 6,000               |
| Marine Services                               | [57,730]                          | [-5,202]            |                     |
| Aircraft Services                             | 10,000                            | (100)               |                     |
| <b>Total Program Support Changes</b>          |                                   | (1,250)             | 6,711               |
| <br>Total Program Support Request: 77,158     |                                   |                     |                     |



(Dollars in thousands)

|  | FY 1997<br>Currently<br>Available | FY 1998<br>Decrease | FY 1998<br>Increase |
|--|-----------------------------------|---------------------|---------------------|
| <b>FACILITIES</b>                                      |                                   |                     |                     |
| NOAA Facilities Maintenance                            |                                   |                     |                     |
| NOAA Facilities Maintenance                            | 3,800                             |                     | 688                 |
| [NOAA Facilities Maintenance (Construction)]           |                                   | [-3,800]            |                     |
| [NOAA Facilities Maintenance (ORF)]                    |                                   |                     | [+4,488]            |
| Sandy Hook Lease                                       | 1,750                             |                     | 250                 |
| [Sandy Hook Lease(Construction)]                       |                                   | [-1,750]            |                     |
| [Sandy Hook Lease(ORF)]                                |                                   |                     | [+2,000]            |
| Environmental Compliance and Pribilof                  |                                   |                     |                     |
| Environmental Compliance                               | 2,000                             |                     | 1,700               |
| [Environmental Compliance(Construction)]               |                                   | [-2,000]            |                     |
| [Environmental Compliance(ORF)]                        |                                   |                     | [+3,700]            |
| Pribilof Island Environmental Cleanup Fund             | 5,000                             | (5,000)             |                     |
| NWS Maintenance and Construction                       |                                   |                     |                     |
| NEXRAD WFO Maintenance                                 | 1,000                             |                     | 1,950               |
| [NEXRAD WFO Maint. (Construction)]                     |                                   | [-1,000]            |                     |
| [NEXRAD WFO Maint. (ORF)]                              |                                   |                     | [+2,950]            |
| NEXRAD WFO Construction/& NCEP                         | 12,000                            |                     | 2,523               |
| [NEXRAD WFO Construction/Maint. & NCEP (Construction)] |                                   | [-12,000]           |                     |
| [NEXRAD WFO Construction/Maint. & NCEP (CAA)]          |                                   |                     | [+14,523]           |
| New Construction                                       |                                   |                     |                     |
| Boulder Laboratory above standard cost (Cap Acq. Acct) | 2,000                             | (100)               |                     |
| [Boulder Laboratory above standard cost(Construction)] |                                   | [-2,000]            |                     |
| [Boulder Laboratory above standard cost(CAA)]          |                                   |                     | [+1,900]            |
| Santa Cruz Research Lab (Cap Acq. Acct)                |                                   |                     | 15,200              |
| Honolulu Fish Lab                                      | 2,000                             | (2,000)             |                     |
| Alaska Fisheries Center                                | 6,000                             | (6,000)             |                     |
| Charleston Fisheries Lab Repairs                       | 5,000                             | (5,000)             |                     |
| Newport Marine Science Center                          | 3,500                             | (3,500)             |                     |
| Goddard Science Center (Cap Acq. Acct)                 |                                   |                     | 12,572              |
| Other Projects   |                                   |                     |                     |
| Columbia River Facilities                              | 4,700                             | (235)               |                     |
| [Columbia River Facilities(Construction)]              |                                   | [-4,700]            |                     |
| [Columbia River Facilities(ORF)]                       |                                   |                     | [+4,465]            |
| Natural Estuarine Research Reserve                     | 1,000                             | (1,000)             |                     |
| Environmental Technology Facility (NH)                 | 8,500                             | (8,500)             |                     |
| <b>Total Facilities Changes</b>                        |                                   | (31,335)            | 34,883              |

(Dollars in thousands)

|   | FY 1997<br>Currently<br>Available | FY 1998<br>Decrease | FY 1998<br>Increase |
|---|-----------------------------------|---------------------|---------------------|
| <b>Fleet Maintenance and Planning</b>                       | 8,000                             |                     | 3,823               |
| <i>[Fleet Modernization, Shipbuilding &amp; Conversion]</i> |                                   | <i>[-8,000]</i>     |                     |
| <i>[Fleet Maintenance and Planning (ORF)]</i>               |                                   |                     | <i>[+11,823]</i>    |
| <b>OTHER ACCOUNTS</b>                                       |                                   |                     |                     |
| <b>Promote and Develop Fisheries</b>                        | 381                               |                     | 3,619               |
| <b>Fishing Vessel and Gear Damage Fund</b>                  | 200                               | (200)               |                     |
| <b>Fishermen's Contingency Fund</b>                         | 1,000                             | (47)                |                     |
| <b>Foreign Fishing Observer Fund</b>                        | 196                               | (7)                 |                     |
| <b>Fisheries Financing Program</b>                          | 250                               | (12)                |                     |
| <b>Total Other Account Changes</b>                          | (266)                             | 3,619               |                     |
| <b>TOTAL CHANGES NOAA</b>                                   |                                   | (172,503)           | 245,985             |

# Bridge of Changes from FY 1997 to FY 1998 Related to Change in the Account Structure

|   | FY 1997 Available | -----ORF Account-----     |                         |                       | ----- CAA Account----- |                         |                       | Total Request |
|---|-------------------|---------------------------|-------------------------|-----------------------|------------------------|-------------------------|-----------------------|---------------|
|   |                   | FY 1998 Change in Non-ORF | Change in Acct. Request | Other Program Changes | FY 1998 Request        | Change in Acct. Request | Other Program Changes |               |
| Change in ORF   | 1,500             |                           |                         | (590)                 | 910                    | 0                       | 910                   |               |
| Radioonde Replacement Network                         | 53,145            |                           | (11,377)                | (2,177)               | 39,591                 | 11,377                  | 50,968                |               |
| NEXRAD  | 10,056            |                           | (4,494)                 | (221)                 | 5,341                  | 4,494                   | 9,835                 |               |
| ASOS  | 100,000           |                           | (100,000)               | 0                     | 0                      | 100,000                 | 116,910               |               |
| AWIPS   | 14,000            |                           | (5,910)                 | (90)                  | 8,000                  | 5,910                   | 13,910                |               |
| Computer Facility Upgrades                            | 147,300           |                           | (82,905)                | (64,395)              | 0                      | 82,905                  | 82,905                |               |
| POES K-N'   | 110,621           |                           | (89,854)                | (20,767)              | 0                      | 89,854                  | 89,854                |               |
| GOES I-M  | 60,859            |                           | (60,859)                | 0                     | 60,859                 | 86,960                  | 147,819               |               |
| GOES N-Q  |                   |                           |                         |                       |                        |                         |                       |               |
| <b>Changes in Construction Account</b>                |                   |                           |                         |                       |                        |                         |                       |               |
| <b>Facilities</b>                                     |                   |                           |                         |                       |                        |                         |                       |               |
| NOAA Facilities Maintenance                           | 3,800             | (3,800)                   | 3,800                   | 688                   | 4,488                  |                         | 4,488                 |               |
| NOAA Maintenance and Repairs                          | 1,750             | (1,750)                   | 1,750                   | 250                   | 2,000                  | 0                       | 2,000                 |               |
| Sandy Hook lease                                      |                   |                           |                         |                       |                        |                         |                       |               |
| Environmental Compliance and Pribilof                 | 2,000             | (2,000)                   | 2,000                   | 1,700                 | 3,700                  |                         | 3,700                 |               |
| Environmental compliance                              | 5,000             | (5,000)                   |                         |                       |                        |                         |                       |               |
| Pribilof Island Cleanup                               |                   |                           |                         |                       |                        |                         |                       |               |
| NWS Maintenance and Construction                      | 1,000             | (1,000)                   | 1,000                   | 1,950                 | 2,950                  |                         | 2,950                 |               |
| NEXRAD WFO Maintenance                                | 12,000            | (12,000)                  | 0                       | 12,000                | 1,823                  | 13,823                  | 700                   |               |
| NEXRAD WFO Construction/Maint.                        |                   |                           |                         |                       |                        |                         |                       |               |
| National Centers for Environ. Prediction Construction | 2,000             | (100)                     | 0                       |                       |                        | 1,900                   | 1,900                 |               |
| Boulder lab - above standard costs                    |                   |                           |                         |                       |                        |                         |                       |               |
| Santa Cruz/Tiburou                                    | 2,000             | (2,000)                   |                         |                       |                        |                         |                       |               |
| Honolulu Fish Lab                                     | 6,000             | (6,000)                   |                         |                       |                        |                         |                       |               |
| Alaska Fisheries Center                               | 5,000             | (5,000)                   |                         |                       |                        |                         |                       |               |
| Charleston Fisheries Lab repairs                      |                   |                           |                         |                       |                        |                         |                       |               |
| Goddard Facility                                      | 3,500             | (3,500)                   |                         |                       |                        |                         |                       |               |
| Newport Marine Science Center                         |                   |                           |                         |                       |                        |                         |                       |               |
| Other Projects  | 4,700             | (235)                     | 4,465                   |                       | 4,465                  |                         | 4,465                 |               |
| Columbia River Facilities                             | 1,000             | (1,000)                   |                         |                       |                        |                         |                       |               |
| National Estuarine Research Reserve                   | 8,500             | (8,500)                   |                         |                       |                        |                         |                       |               |
| Environment Technology Facility (NH)                  |                   |                           |                         |                       |                        |                         |                       |               |
| <b>Fleet</b>  |                   |                           |                         |                       |                        |                         |                       |               |
| <b>Changes to Fleet Account</b>                       | 8,000             | (8,000)                   | 8,000                   | 3,823                 | 11,823                 |                         | 11,823                |               |
| Fleet   |                   |                           |                         |                       |                        |                         |                       |               |
|   |                   | (59,885)                  | (334,384)               | (79,829)              |                        | 369,299                 | 134,165               |               |

## Summary of Changes From FY 1997 for ORF

| (Dollars in thousands)                            | <u>FTE</u> | <u>Amount</u>   |
|---|------------|-----------------|
| Financing:  |            |                 |
| Recoveries for Prior Years-FY 1997                |            | 14,000          |
| Recoveries for Prior Years-FY 1998                |            | <u>(24,000)</u> |
| Total Financing                                   |            | (10,000)        |
| Adjustments to Base:                              |            |                 |
| Rent savings to finance Goddard                   |            | (4,656)         |
| Non-Recurring (Security)                          |            | (5,670)         |
| Restoration of FY 1997 Rescission                 |            | <u>20,000</u>   |
| <b>Subtotal</b>                                   |            | 9,674           |
| Other Changes:                                    |            |                 |
| 1998 Pay raise                                    |            | 12,313          |
| Annualization of Jan., 1997 Pay Raise             |            | 4,065           |
| Within-grade step increases                       |            | 5,741           |
| Longevity increase for Commissioned Officers      |            | 410             |
| Subsistence and Basis Allowance                   |            | (137)           |
| Employees' Compensation Fund                      |            | (96)            |
| Civil Service Retirement & Disability             |            | (38)            |
| Civil Service Retirement System (CSRS)            |            | (746)           |
| Federal Employees Retirement System (FERS)        |            | 1,246           |
| Thrift Savings Plan                               |            | 213             |
| Federal Insurance Contribution Act (FICA) - OASDI |            | 256             |
| Health insurance premiums                         |            | (157)           |
| Benefits for retired NOAA Corps Officers          |            | 1,287           |
| Travel:   |            |                 |
| Per diem  |            | 90              |
| Mileage   |            | 66              |
| Transportation of things                          |            | 119             |
| Rental payments to GSA                            |            | 1,038           |
| Printing and reproduction                         |            | 270             |
| Other services                                    |            | 1,515           |
| Working Capital Fund                              |            | 236             |
| General Pricing Adjustments                       |            | 2,925           |
| Grants  |            | 275             |
| <b>Subtotal, Other cost changes</b>               |            | 30,891          |
| <b>ATBs Absorbed</b>                              |            | (25,221)        |
| <b>ATBs Requested</b>                             |            | 15,344          |
| <b>Total, Changes to Base</b>                     |            | 5,344           |

# Reauthorization

Several Public Laws covering the budget authority request in FY 1998 budget need reauthorization in the 1st session of the 105th Congress. These authorizing acts and the appropriate dollar amounts are shown on the chart below.

(Dollars in thousands)

| <b>National Oceanic and<br/>Atmospheric Administration</b>                                      | 1997<br>Currently<br>Available | 1998<br>President's<br>Request |
|---|--------------------------------|--------------------------------|
| National Marine Fisheries Service<br>Endangered Species Act of 1973,<br>P.L. 100-478, exp. 9/92 | 21,529                         | 30,741                         |
| Oceanic and Atmospheric Research<br>National Sea Grant Program Act<br>P.L. 102-186, exp. 9/96   | 54,300                         | 50,182                         |

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
 Details of the FY 1998 President's Budget  
 (Dollars in Thousands)

|   | FY 1997 |          | FY 1998 Estimate |          | Increase/(Decrease) |          |
|---|---------|----------|------------------|----------|---------------------|----------|
|   | FTE     | B.A.     | FTE              | B.A.     | FTE                 | B.A.     |
| <b>NATIONAL OCEAN SERVICE:</b>                |         |          |                  |          |                     |          |
| Navigation Services:                          |         |          |                  |          |                     |          |
| Mapping and Charting                          | 298     | \$38,000 | 298              | \$35,500 | 0                   | (2,500)  |
| Aeronautical charting transfer to FAA         |         | 0        | (129)            | (14,481) | (129)               | (14,481) |
| Replacement of funds formerly provided by DMA |         | 0        | 69               | 12,581   | 69                  | 12,581   |
| Automated Nautical Charting System II         |         | 0        | 2,500            | 0        | 2,500               |          |
| Subtotal                                      | 298     | 38,000   | 238              | 36,100   | (60)                | (1,900)  |
| Geodesy                                       | 197     | 20,167   | 197              | 19,159   | 0                   | (1,008)  |
| Tides and Current Data                        | 141     | 12,500   | 141              | 11,000   | 0                   | (1,500)  |
| Total, Navigation Services                    | 636     | 70,667   | 576              | 66,259   | (60)                | (4,408)  |
| Ocean Resources Conservation & Assessment:    |         |          |                  |          |                     |          |
| Estuarine and Coastal Assessment              | 2,674   | 2,674    | 0                | 0        |                     |          |
| Ocean assessment program                      | 255     | 27,300   | 255              | 28,425   | 0                   | 1,125    |
| Damage assessment                             |         | 2,200    | 3,000            | 0        | 800                 |          |
| Transfer from Damage Assessment Fund          |         | 7,000    | 6,700            | 0        | (300)               |          |
| Oil Pollution Act of 1990                     |         | 1,000    | 1,000            | 0        | 0                   |          |
| Ocean services                                |         | 2,500    | 2,800            | 0        | 300                 |          |
| Subtotal                                      | 255     | 42,674   | 255              | 44,599   | 0                   | 1,925    |
| Coastal Ocean Science                         |         |          |                  |          |                     |          |
| Coastal ocean program                         | 21      | 15,200   | 21               | 15,200   | 0                   | 0        |
| Subtotal                                      | 21      | 15,200   | 21               | 15,200   | 0                   | 0        |
| Total, Ocean Res Conserv & Assessment         | 276     | 57,874   | 276              | 59,799   | 0                   | 1,925    |
| Ocean and Coastal Management:                 |         |          |                  |          |                     |          |
| Coastal Management                            |         |          |                  |          |                     |          |
| CZM grants                                    |         | 46,200   | 65,732           | 0        | 19,532              |          |
| Estuarine research reserve system             |         | 1,300    | 4,300            | 0        | 3,000               |          |
| Nonpoint pollution control                    |         | 0        | 1,000            | 0        | 1,000               |          |
| Subtotal                                      | 0       | 47,500   | 0                | 71,032   | 0                   | 23,532   |
| Ocean Management                              |         |          |                  |          |                     |          |
| Marine sanctuary program                      | 97      | 11,685   | 97               | 13,200   | 0                   | 1,515    |
| Subtotal                                      | 97      | 11,685   | 97               | 13,200   | 0                   | 1,515    |
| Total, Ocean and Coastal Management           | 97      | 59,185   | 97               | 84,232   | 0                   | 25,047   |
| Acquisition of Data                           | 230     | 18,200   | 230              | 14,546   | 0                   | (3,654)  |
| TOTAL, NOS                                    | 1,239   | 205,926  | 1,179            | 224,836  | (60)                | 18,910   |

|   | FY 1997                    |         | FY 1998 Estimate |         | Increase/(Decrease) |       |
|---|----------------------------|---------|------------------|---------|---------------------|-------|
|   | Currently Available<br>FTE | B.A.    | FTE              | B.A.    | FTE                 | B.A.  |
| <b>NATIONAL MARINE FISHERIES SERVICE:</b>     |                            |         |                  |         |                     |       |
| <b>Information Collection &amp; Analyses:</b> |                            |         |                  |         |                     |       |
| Resource Information                          | 933                        | 91,330  | 933              | 92,992  | 0                   | 1,662 |
| Antarctic research                            |                            | 1,200   |                  | 1,200   | 0                   | 0     |
| Chesapeake Bay Studies                        |                            | 1,890   |                  | 1,500   | 0                   | (390) |
| Right whale research                          |                            | 250     |                  | 200     | 0                   | (50)  |
| MARFIN  |                            | 3,000   |                  | 3,000   | 0                   | 0     |
| SEAMAP  |                            | 1,200   |                  | 1,200   | 0                   | 0     |
| Alaskan groundfish surveys                    |                            | 661     |                  | 661     | 0                   | 0     |
| Bering Sea pollock research                   |                            | 945     |                  | 945     | 0                   | 0     |
| West Coast groundfish                         |                            | 780     |                  | 780     | 0                   | 0     |
| New England stock depletion                   |                            | 1,000   |                  | 1,000   | 0                   | 0     |
| Hawaii stock management plan                  |                            | 500     |                  | 0       | 0                   | (500) |
| Yukon River chinook salmon                    |                            | 700     |                  | 700     | 0                   | 0     |
| Atlantic salmon research                      |                            | 710     |                  | 710     | 0                   | 0     |
| Gulf of Maine groundfish survey               |                            | 567     |                  | 567     | 0                   | 0     |
| Dolphin/yellowfin tuna research               |                            | 250     |                  | 250     | 0                   | 0     |
| Habitat research/evaluation                   |                            | 450     |                  | 450     | 0                   | 0     |
| Pacific salmon treaty program                 |                            | 5,587   |                  | 5,587   | 0                   | 0     |
| Fish cooperative institute                    |                            | 410     |                  | 410     | 0                   | 0     |
| Hawaiian monk seals                           |                            | 500     |                  | 500     | 0                   | 0     |
| Stellar sea lion recovery plan                |                            | 1,770   |                  | 1,440   | 0                   | (330) |
| Hawaiian sea turtles                          |                            | 248     |                  | 248     | 0                   | 0     |
| Bluefish/striped bass                         |                            | 785     |                  | 0       | 0                   | (785) |
| Gulf of Mexico mariculture                    |                            | 300     |                  | 0       | 0                   | (300) |
| Halibut/sablefish                             |                            | 1,200   |                  | 1,200   | 0                   | 0     |
| Subtotal                                      | 933                        | 116,233 | 933              | 115,540 | 0                   | (693) |
| Fishery Industry Information                  |                            |         |                  |         |                     |       |
| Fish statistics                               | 146                        | 13,000  | 146              | 13,400  | 0                   | 400   |
| Alaska groundfish monitoring                  |                            | 5,200   |                  | 5,200   | 0                   | 0     |
| PACFIN/catch effort data                      |                            | 3,000   |                  | 3,000   | 0                   | 0     |
| Rec fishery harvest monitoring                |                            | 3,400   |                  | 3,100   | 0                   | (300) |
| Subtotal                                      | 146                        | 24,600  | 146              | 24,700  | 0                   | 100   |
| Information Analyses & Dissemination          | 243                        | 20,900  | 243              | 21,200  | 0                   | 300   |
| Computer hardware and software                |                            | 4,000   |                  | 4,000   | 0                   | 0     |
| Subtotal                                      | 243                        | 24,900  | 243              | 25,200  | 0                   | 300   |
| Total, Info, Collection, & Analyses           | 1,322                      | 165,733 | 1,322            | 165,440 | 0                   | (293) |

|  | FY 1997 |         | FY 1998 Estimate |         | Increase/(Decrease) |         |
|--|---------|---------|------------------|---------|---------------------|---------|
|  | FTE     | B.A.    | FTE              | B.A.    | FTE                 | B.A.    |
| <b>Conservation and Management Operations:</b> |         |         |                  |         |                     |         |
| Fisheries Management Programs                  | 193     | 20,300  | 205              | 29,300  | 12                  | 9,000   |
| Columbia River hatcheries                      |         | 10,955  |                  | 10,300  | 0                   | (655)   |
| Columbia River end species studies             |         | 288     |                  | 288     | 0                   | 0       |
| Regional councils                              |         | 10,200  |                  | 11,700  | 0                   | 1,500   |
| International fisheries commissions            |         | 950     |                  | 400     | 0                   | (550)   |
| Management of George's Bank                    |         | 478     |                  | 478     | 0                   | 0       |
| Beluga whale committee                         |         | 200     |                  | 200     | 0                   | 0       |
| Pacific tuna management                        |         | 1,900   |                  | 1,500   | 0                   | (400)   |
| Subtotal                                       | 193     | 45,271  | 205              | 54,166  | 12                  | 8,895   |
| Protected Species Management                   | 237     | 5,700   | 282              | 6,750   | 45                  | 1,050   |
| Driftnet Act implementation                    |         | 3,278   |                  | 3,278   | 0                   | 0       |
| Marine Mammal Protection Act                   |         | 9,125   |                  | 9,500   | 0                   | 375     |
| Endangered Species Act recovery plan           |         | 13,500  |                  | 20,200  | 0                   | 6,700   |
| Fishery observer training                      |         | 417     |                  | 0       | 0                   | (417)   |
| East Coast observers                           |         | 350     |                  | 350     | 0                   | 0       |
| Subtotal                                       | 237     | 32,370  | 282              | 40,078  | 45                  | 7,708   |
| Habitat Conservation                           | 116     | 8,000   | 116              | 9,800   | 0                   | 1,800   |
| Enforcement & Surveillance                     | 171     | 16,500  | 171              | 18,200  | 0                   | 1,700   |
| Total, Conservation and Mgmt Opns              | 717     | 102,141 | 774              | 122,244 | 57                  | 20,103  |
| <b>State and Industry Assistance Programs:</b> |         |         |                  |         |                     |         |
| Interjurisdictional fisheries grants           | 1       | 2,600   | 1                | 2,600   | 0                   | 0       |
| Anadromous grants                              |         | 2,108   |                  | 2,108   | 0                   | 0       |
| Anadromous fishery project                     |         | 0       |                  | 250     | 0                   | 250     |
| Interstate fish commissions                    |         | 5,000   |                  | 4,000   | 0                   | (1,000) |
| Subtotal                                       | 1       | 9,708   | 1                | 8,958   | 0                   | (750)   |
| Fisheries Development Program                  |         |         |                  |         |                     |         |
| Product quality and safety                     | 154     | 14,624  | 154              | 14,624  | 0                   | 0       |
| Hawaiiin fisheries development                 |         | 750     |                  | 0       | 0                   | (750)   |
| Fisheries Biotechnology                        |         | 1,900   |                  | 1,900   | 0                   | 0       |
| Subtotal                                       | 154     | 17,274  | 154              | 16,524  | 0                   | (750)   |
| Total, State & Industry Assist Progs           | 155     | 26,982  | 155              | 25,482  | 0                   | (1,500) |
| Acquisition of Data                            | 332     | 26,840  | 332              | 25,098  | 0                   | (1,742) |
| TOTAL, NMFS                                    | 2,526   | 321,696 | 2,583            | 338,264 | 57                  | 16,568  |



|  | FY 1997                    |         | FY 1998 Estimate |         | Increase/(Decrease) |          |
|--|----------------------------|---------|------------------|---------|---------------------|----------|
|  | Currently Available<br>FTE | B.A.    | FTE              | B.A.    | FTE                 | B.A.     |
| <b>OCEANIC AND ATMOSPHERIC RESEARCH:</b> |                            |         |                  |         |                     |          |
| Climate and Air Quality Research:        |                            |         |                  |         |                     |          |
| Interannual & Seasonal Climate Research  | 140                        | 68,000  | 21               | 12,900  | (119)               | (55,100) |
| Long-Term Climate & Air Quality Research | 213                        | 28,372  | 213              | 29,402  | 0                   | 1,030    |
| High Performance Computing               | 4                          | 7,500   | 4                | 7,500   | 0                   | 0        |
| Subtotal                                 | 217                        | 35,872  | 217              | 36,902  | 0                   | 1,030    |
| GLOBE                                    | 4                          | 6,000   | 4                | 7,000   | 0                   | 1,000    |
| <i>Climate and Global Change</i>         | 0                          | 119     | 62,000           | 119     | <u>62,000</u>       |          |
| Subtotal                                 | 4                          | 6,000   | 123              | 69,000  | 119                 | 63,000   |
| Total, Climate and Air Quality           | 361                        | 109,872 | 361              | 118,802 | 0                   | 8,930    |
| Atmospheric Programs:                    |                            |         |                  |         |                     |          |
| Weather Research                         | 228                        | 33,613  | 228              | 33,613  | 0                   | 0        |
| Wind profiler                            |                            | 4,350   | 4,350            | 0       | 0                   |          |
| Subtotal                                 | 228                        | 37,963  | 228              | 37,963  | 0                   | 0        |
| Solar-Terrestrial services and research  | 65                         | 5,493   | 65               | 5,493   | 0                   | 0        |
| Total, Atmospheric Programs              | 293                        | 43,456  | 293              | 43,456  | 0                   | 0        |
| Ocean and Great Lakes Programs:          |                            |         |                  |         |                     |          |
| Marine Prediction Research               | 135                        | 15,651  | 135              | 12,126  | 0                   | (3,525)  |
| GLERL                                    |                            | 5,200   | 5,200            | 0       | 0                   |          |
| Subtotal                                 | 135                        | 20,851  | 135              | 17,326  | 0                   | (3,525)  |
| Sea Grant                                |                            |         |                  |         |                     |          |
| Sea grant college program                | 22                         | 54,300  | 22               | 50,182  | 0                   | (4,118)  |
| Subtotal                                 | 22                         | 54,300  | 22               | 50,182  | 0                   | (4,118)  |
| Undersea Research Program                |                            |         |                  |         |                     |          |
| National Undersea Research Program       | 8                          | 12,000  | 8                | 5,400   | 0                   | (6,600)  |
| Subtotal                                 | 8                          | 12,000  | 8                | 5,400   | 0                   | (6,600)  |
| Total, Ocean & Great Lakes Programs      | 165                        | 87,151  | 165              | 72,908  | 0                   | (14,243) |
| Acquisition of Data                      | 127                        | 12,690  | 127              | 12,884  | 0                   | 194      |
| TOTAL, OAR                               | 946                        | 253,169 | 946              | 248,050 | 0                   | (5,119)  |

|   | FY97 Currently Available |          | FY 1998 Estimate |           | Increase/(Decrease) |           |
|---|--------------------------|----------|------------------|-----------|---------------------|-----------|
|   | FTE                      | B.A.     | FTE              | B.A.      | FTE                 | B.A.      |
| <b>NATIONAL WEATHER SERVICE:</b>  |                          |          |                  |           |                     |           |
| Operations and Research:  |                          |          |                  |           |                     |           |
| Local Warnings and Forecasts  | 3,840                    | 390,000  | 3,840            | 381,674   | 0                   | (8,326)   |
| MARDI   | 629                      | [91,462] | 370              | [73,674]  | (259)               |           |
| REGO II Savings   |                          | [-7,065] |                  | [-12,157] |                     |           |
| Radiosonde Replacement  |                          | 1,500    |                  | 910       | 0                   | (590)     |
| Susquehanna River Basin Flood Sys   |                          | 1,000    | 619              | 0         | (381)               |           |
| Aviation forecasts  |                          | 35,596   |                  | 35,596    | 0                   | 0         |
| Regional climate centers'   |                          | 2,000    |                  | 0         | 0                   | (2,000)   |
| Subtotal  | 4,469                    | 430,096  | 4,210            | 418,799   | (259)               | (11,297)  |
| Central Forecast Guidance   | 266                      | 28,700   | 266              | 29,543    | 0                   | 843       |
| Atmospheric and Hydrological Research                                       | 45                       | 2,000    | 45               | 2,489     | 0                   | 489       |
| Total, Operations and Research  | 4,780                    | 460,796  | 4,521            | 450,831   | (259)               | (9,965)   |
| Systems Acquisition:  |                          |          |                  |           |                     |           |
| Public Warning and Forecast Systems   |                          |          |                  |           |                     |           |
| NEXRAD  | 231                      | 53,145   | 179              | 39,591    | (52)                | (13,554)  |
| ASOS  | 33                       | 10,056   |                  | 5,341     | (33)                | (4,715)   |
| AWIPS/NOAAPort  | 155                      | 100,000  |                  |           | (155)               | (100,000) |
| Computer Facility Upgrades  |                          | 14,000   |                  | 8,000     | 0                   | (6,000)   |
| Total, Systems Acquisition  | 419                      | 177,201  | 179              | 52,932    | (240)               | (124,269) |
| TOTAL, NWS  | 5,199                    | 637,997  | 4,700            | 503,763   | (499)               | (134,234) |
| <b>NATIONAL ENVIRONMENTAL SATELLITE,<br/>DATA, AND INFORMATION SERVICE:</b> |                          |          |                  |           |                     |           |
| Satellite Observing Systems:  |                          |          |                  |           |                     |           |
| Polar spacecraft and launching  | 13                       | 147,300  |                  |           | (13)                | (147,300) |
| Polar convergence/IPO   |                          | 29,000   |                  | 51,503    | 0                   | 22,503    |
| Geostationary spacecraft and launching                                      | 21                       | 171,480  |                  |           | (21)                | (171,480) |
| Ocean remote sensing  |                          | 4,000    |                  | 3,800     | 0                   | (200)     |
| Environmental observing services  | 507                      | 51,000   | 507              | 50,347    | 0                   | (653)     |
| Total, Satellite Observing Systems  | 541                      | 402,780  | 507              | 105,650   | (34)                | (297,130) |
| Environmental Data Management Systems :                                     |                          |          |                  |           |                     |           |
| Data & Information Services   | 266                      | 30,002   | 266              | 27,500    | 0                   | (2,502)   |
| Environmental Data Systems Modernization                                    |                          | 14,800   |                  | 16,335    | 0                   | 1,535     |
| Total, EDMS   | 266                      | 44,802   | 266              | 43,835    | 0                   | (967)     |
| TOTAL, NESDIS   | 807                      | 447,582  | 773              | 149,485   | (34)                | (298,097) |

|   | FY 1997                    |                  | FY 1998 Estimate |                  | Increase/(Decrease) |                  |
|---|----------------------------|------------------|------------------|------------------|---------------------|------------------|
|   | Currently Available<br>FTE | B.A.             | FTE              | B.A.             | FTE                 | B.A.             |
| <b>PROGRAM SUPPORT:</b>                         |                            |                  |                  |                  |                     |                  |
| <b>Administration and Services:</b>             |                            |                  |                  |                  |                     |                  |
| Executive direction and administration          | 292                        | 19,200           | 292              | 19,986           | 0                   | 786              |
| Systems Acquisition Office (SAO)                | 36                         | 1,497            | 36               | 1,422            | 0                   | (75)             |
| Subtotal  | 328                        | 20,697           | 328              | 21,408           | 0                   | 711              |
| Central Administrative Support                  | 795                        | 33,000           | 795              | 31,850           | 0                   | (1,150)          |
| Retired Pay/Benefits Commissioned Officers      | 0                          | 8,000            | 0                | 14,000           | 0                   | 6,000            |
| Total, Administration and Services              | 1,123                      | 61,697           | 1,123            | 67,258           | 0                   | 5,561            |
| <b>Marine Services</b>                          |                            |                  |                  |                  |                     |                  |
| Aircraft Services                               | 106                        | 10,000           | 106              | 9,900            | 0                   | (100)            |
| TOTAL, PS                                       | 1,229                      | 71,697           | 1,229            | 77,158           | 0                   | 5,461            |
| <b>FLEET MAINTENANCE &amp; PLANNING:</b>        |                            |                  | 12               | 11,823           | 12                  | 11,823           |
| <b>FACILITIES:</b>                              |                            |                  |                  |                  |                     |                  |
| NOAA facilities maintenance                     |                            |                  | 6                | 4,488            | 6                   | 4,488            |
| Sandy Hook lease                                |                            |                  |                  | 2,000            | 0                   | 2,000            |
| Environmental compliance                        |                            |                  | 9                | 3,700            | 9                   | 3,700            |
| WFO maintenance                                 |                            |                  |                  | 2,950            | 0                   | 2,950            |
| Columbia River facilities                       |                            |                  |                  | 4,465            | 0                   | 4,465            |
| TOTAL, FACILITIES                               |                            |                  | 15               | 17,603           | 15                  | 17,603           |
| Direct Obligations                              | 11,946                     | 1,938,067        | 11,437           | 1,570,982        | (509)               | (367,085)        |
| Rent savings to finance Goddard                 |                            | 0                |                  | (4,656)          | 0                   | (4,656)          |
| Rescissions of unobligated balances             |                            | (20,000)         |                  | 0                | 0                   | 20,000           |
| <b>DIRECT OBLIGATIONS</b>                       | <b>11,946</b>              | <b>1,918,067</b> | <b>11,437</b>    | <b>1,566,326</b> | <b>(509)</b>        | <b>(351,741)</b> |
| <b>REIMBURSABLE OBLIGATIONS</b>                 | <b>1,205</b>               | <b>315,215</b>   | <b>1,299</b>     | <b>317,015</b>   | <b>94</b>           | <b>1,800</b>     |
| Offsetting collections (data sales)             |                            | 1,200            |                  | 2,400            | 0                   | 1,200            |
| Anticipated offsetting collections (aerocharts) |                            | 3,000            |                  | 0                | 0                   | (3,000)          |
| Subtotal  | 1,205                      | 319,415          | 1,299            | 319,415          | 94                  | 0                |
| <b>TOTAL OBLIGATIONS</b>                        | <b>13,151</b>              | <b>2,237,482</b> | <b>12,736</b>    | <b>1,885,741</b> | <b>(415)</b>        | <b>(351,741)</b> |
| <b>FINANCING:</b>                               |                            |                  |                  |                  |                     |                  |
| <b>Direct</b>                                   |                            |                  |                  |                  |                     |                  |
| Prior year recoveries (direct)                  |                            | (14,000)         |                  | (24,000)         | 0                   | (10,000)         |
| Unobligated balance transferred, net            |                            | (1,500)          |                  | (1,500)          | 0                   | 0                |
| <b>Reimbursable</b>                             |                            |                  |                  |                  |                     |                  |
| Federal ship financing fund expenses            |                            | (1,700)          |                  | 0                | 0                   | 1,700            |
| Offsetting collections (data sales)             |                            | (1,200)          |                  | (2,400)          | 0                   | (1,200)          |
| Federal funds                                   |                            | (172,000)        |                  | (172,000)        | 0                   | 0                |
| Non-federal funds                               |                            | (141,515)        |                  | (145,015)        | 0                   | (3,500)          |
| Anticipated offsetting collections (aerocharts) |                            | (3,000)          |                  | 0                | 0                   | 3,000            |
| <b>TOTAL BUDGET AUTHORITY, ORF</b>              | <b>11,946</b>              | <b>1,902,567</b> | <b>11,437</b>    | <b>1,540,826</b> | <b>(509)</b>        | <b>(361,741)</b> |
| <b>DISCRETIONARY BUDGET AUTHORITY</b>           | <b>11,946</b>              | <b>1,902,567</b> | <b>11,437</b>    | <b>1,540,826</b> | <b>(509)</b>        | <b>(361,741)</b> |
| <b>FINANCING FROM:</b>                          |                            |                  |                  |                  |                     |                  |
| Promote and develop American fisheries          |                            | (66,000)         |                  | (62,381)         | 0                   | 3,619            |
| Damage assess & restoration revolving fund      |                            | (5,500)          |                  | (5,200)          | 0                   | 300              |
| <b>NET APPROPRIATION, ORF</b>                   | <b>11,946</b>              | <b>1,831,067</b> | <b>11,437</b>    | <b>1,473,245</b> | <b>(509)</b>        | <b>(357,822)</b> |
| Anticipated offsetting collections (aerocharts) |                            | 3,000            |                  | 0                | 0                   | (3,000)          |
| <b>GROSS APPROPRIATION, ORF w/ collections</b>  | <b>11,946</b>              | <b>1,834,067</b> | <b>11,437</b>    | <b>1,473,245</b> | <b>(509)</b>        | <b>(360,822)</b> |

|  | FY 1997 |           | FY 1998 Estimate |           | Increase/(Decrease) |          |
|--|---------|-----------|------------------|-----------|---------------------|----------|
|  | FTE     | B.A.      | FTE              | B.A.      | FTE                 | B.A.     |
| OTHER ACCOUNTS: BA                             |         |           |                  |           |                     |          |
| Capital Assets Acquisition:                    |         |           |                  |           |                     |          |
| Systems Acquisition:                           |         |           |                  |           |                     |          |
| NEXRAD   |         |           | 25               | 11,377    | 25                  | 11,377   |
| ASOS   |         |           | 27               | 4,494     | 27                  | 4,494    |
| AWIPS/NOAAPort                                 |         |           | 142              | 116,910   | 142                 | 116,910  |
| Computer Facility Upgrades                     |         |           | 0                | 5,910     | 0                   | 5,910    |
| POES K - N'                                    |         |           | 13               | 82,905    | 13                  | 82,905   |
| GOES I - M                                     |         |           | 8                | 89,854    | 8                   | 89,854   |
| GOES N - Q                                     |         |           | 13               | 147,819   | 13                  | 147,819  |
| Subtotal                                       | 0       | 0         | 228              | 459,269   | 228                 | 459,269  |
| Construction:                                  |         |           |                  |           |                     |          |
| Goddard facility                               |         |           |                  | 12,572    | 0                   | 12,572   |
| Boulder lab - above standard costs             |         |           | 1,900            | 0         | 1,900               |          |
| WFO construction                               |         |           | 4                | 13,823    | 4                   | 13,823   |
| National Centers for Environmental Prediction  |         |           |                  | 700       | 0                   | 700      |
| Santa Cruz/Tiburon                             |         |           |                  | 15,200    | 0                   | 15,200   |
| Subtotal                                       | 0       | 0         | 4                | 44,195    | 4                   | 44,195   |
| Fleet Modernization:                           |         |           |                  |           |                     |          |
| Total, Capital Assets Acquisition              | 0       | 0         | 232              | 503,464   | 232                 | 503,464  |
| Construction Account:                          |         |           |                  |           |                     |          |
| NOAA Facilities Maintenance                    | 6       | 2,000     |                  |           | (6)                 | (2,000)  |
| NOAA Research Facilities                       |         | 1,800     |                  |           | 0                   | (1,800)  |
| Sandy Hook Lease                               |         | 1,750     |                  |           | 0                   | (1,750)  |
| Environmental Compliance                       | 9       | 2,000     |                  |           | (9)                 | (2,000)  |
| Pribilof Island Environmental Cleanup Fund     |         | 5,000     |                  |           | 0                   | (5,000)  |
| WFO Maintenance                                |         | 1,000     |                  |           | 0                   | (1,000)  |
| WFO Construction                               | 4       | 12,000    |                  |           | (4)                 | (12,000) |
| Boulder Lab - above standard costs             |         | 2,000     |                  |           | 0                   | (2,000)  |
| Columbia River Facilities                      |         | 4,700     |                  |           | 0                   | (4,700)  |
| Honolulu Fish Lab                              |         | 2,000     |                  |           | 0                   | (2,000)  |
| Alaska Fisheries Center                        |         | 6,000     |                  |           | 0                   | (6,000)  |
| Charleston Fisheries Lab Repairs               |         | 5,000     |                  |           | 0                   | (5,000)  |
| Newport Marine Science Center                  |         | 3,500     |                  |           | 0                   | (3,500)  |
| National Estuarine Research Reserve            |         | 1,000     |                  |           | 0                   | (1,000)  |
| New Hampshire Environmental Tech Facility      |         | 8,500     |                  |           | 0                   | (8,500)  |
| Total, Construction                            | 19      | 58,250    |                  |           | (19)                | (58,250) |
| Fleet modernization, shipbuilding & conversion | 17      | 8,000     |                  |           | (17)                | (8,000)  |
| Promote and develop fisheries                  | 4       | 381       | 4                | 4,000     | 0                   | 3,619    |
| Fishing vessel and gear damage fund            | 2       | 200       |                  | 0         | (2)                 | (200)    |
| Fishermen's contingency fund                   | 2       | 1,000     | 2                | 953       | 0                   | (47)     |
| Foreign fishing observer fund                  | 0       | 196       |                  | 189       | 0                   | (7)      |
| North Pacific fishery observer fund            | 0       | 0         |                  | 0         | 0                   | 0        |
| Damage assessment & rest revolving fund        | 0       | (1,500)   |                  | (1,500)   | 0                   | 0        |
| Fisheries finance, program account             | 0       | 250       |                  | 238       | 0                   | (12)     |
| Coastal zone management fund (CZMF)            | 49      | 7,800     | 49               | 7,800     | 0                   | 0        |
| CZMF offsetting collections                    | 0       | (4,400)   |                  | (4,736)   | 0                   | (336)    |
| TOTAL BA OTHER ACCOUNTS                        | 93      | 70,177    | 287              | 510,408   | 194                 | 440,231  |
| TOTAL BA, NOAA - ALL ACCOUNTS                  | 12,039  | 1,972,744 | 11,724           | 2,051,234 | (315)               | 78,490   |
| TOTAL Approp, NOAA - ALL ACCOUNTS              | 11,986  | 1,898,963 | 11,671           | 1,978,089 | (315)               | 79,126   |
| Total BA, NOAA - ALL ACCOUNTS                  | 12,039  | 1,972,744 | 11,724           | 2,051,234 | (315)               | 78,490   |
| CZMF offsetting collections                    |         | 4,400     |                  | 4,736     | 0                   | 336      |
| Transfer for P&D                               |         | (66,381)  |                  | (66,381)  | 0                   | 0        |
| Total, NOAA Discretionary BA                   | 12,039  | 1,910,763 | 11,724           | 1,989,589 | (315)               | 78,826   |