

U. S. Department of Commerce National Oceanic and Atmospheric Administration





FY 2003 BUDGET SUMMARY



Weather Current watches, conditions, hurricanes, tornadoes, NOAA Weather Radio, space weather



Climate El Nino and La Nina, global warming, drought, climate prediction, archived weather data, paleoclimatology



Ocean Coral reefs, tides and currents, buoys, marine sanctuaries, estuaries, diving, oil and chemical spills



Research Environmental labs, air quality, atmospheric processes, climate and human interactions



Satellites Real-time imagery, environmental satellites, geostationary and polar satellites



Coasts Current watches, Coastal services and products, sustainable seas expedition, state of the coast, coastal zone management



Fish statistics and economics, seafood inspections, fishery market news, law enforcement



Charting & Navigation Nautical and aeronautical charts, ocean mapping, safe navigation and transportation

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National Oceanic and Atmospheric Administration



Summary of the President's Budget

Fiscal Year 2003

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U.S. DEPARTMENT OF COMMERCE NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION



To the Reader:

I am pleased to present the Budget Summary for the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) for Fiscal Year 2003. This Summary contains information on NOAA's programs and strategic goals for Members of Congress, Congressional staff, the media, NOAA constituents and customers, and other individuals who have an interest in our programs. It provides information on how NOAA supports and enhances the goals of the President and the Department of Commerce.

NOAA – through its seven line offices and staff offices – has established itself as one of the world's premier scientific and environmental agencies. From Santa Cruz to Beaufort, from Kansas City to Gloucester, from Princeton to Seattle, from Honolulu to Miami, and Silver Spring to Juneau, the men and women of NOAA provide services and address the critical issues that Americans face every day. We are an agency that deals with environmental change. We are an agency whose products form a critical part of the daily decisions made by Americans across the Nation and have economic impacts which affect our Nation's Gross Domestic Product. From our climate predictions that impact farming and financial decisions to our hydrological products that affect public utilities and energy consumption, NOAA is a critical part of our Nation's economic structure. We are experts in climate, with its cooling and warming trends. We are an agency that manages fluctuating fisheries and marine mammal populations. We observe, forecast and warn the public about the rapidly changing atmosphere and especially severe weather. We monitor currents and tides, and beach erosion. We survey the ocean bottom and provide mariners with products to maintain safe navigation. We operate the Nation's most important constellation of earth-observing satellites. Through our website www.noaa.gov we provide a voyage of knowledge and exploration to Americans everywhere, especially to schools and young people across our Nation.

This FY 2003 Budget Request strongly supports NOAA's commitment to advancing our environmental assessment/prediction and natural resource stewardship missions. This budget supports products which are essential for decision makers in every part of our economy. NOAA's budget will continue to fund products which assist in protecting the health and safety of this Nation's citizens from both routine and severe environmental changes. This budget supports our research, science and services from the local weather forecast offices around the Nation to our Fisheries Research Vessels that ensure the sustainability of our Nation's fisheries. It provides for technology infusion and critical infrastructure protection to reduce single points of failure; continues our special partnerships with universities, states, and local governments around the Nation; and invests in education and human resources. This budget also supports our infrastructure, which will allow NOAA to continue its mission in future years.

Under the leadership of Secretary of Commerce Donald L. Evans, we are confident that our team of meteorologists, oceanographers, marine biologists, computer scientists, climatologists and other professionals will do an even better job of serving the American people. Finally and most importantly, we greatly appreciate the support that the Congress and our constituents have provided NOAA in the past.

Corrad C. Lautenbacher, Jr. Vice Admiral, U.S.

Under Secretary of Commerce for Oceans and Atmosphere

Navy (Ret.)

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Executive Summary

Executive Summary



NOAA, a key component of the Department of Commerce, plays a vital role in the everyday lives of our citizens through our numerous contributions to the Nation's economic and environmental health. In a period of strongly competing government priorities, the President's FY 2003 Budget Request for NOAA is \$3,330.5 million in total budget authority and represents a decrease of \$45.4 million below the FY 2002 Enacted level. Within this funding level, NOAA proposes essential realignments that allow for a total of \$148.8 million in program increases in the following critical areas: People and Infrastructure, Improving Extreme Weather Warnings and Forecasts, Climate Services, Modernization of NOAA Fisheries, Energy, Homeland Security, and Coastal Conservation.

Funding requested in the FY 2003 President's Budget Request will allow NOAA to ensure that our vision for environmental stewardship and assessment and prediction of the Nation's resources becomes a reality



and that NOAA will continue to excel in our science and services to the American people.

From weather forecasting to fisheries management, from safe navigation to coastal services, from remote sensing to climate research and ocean exploration, NOAA is at the forefront of many of this Nation's most critical issues. NOAA's people, products and services provide vital support to the domestic

security and global competitiveness of

the United States and positively impact the lives of our citizens, directly and indirectly, every single day.





NOAA's mission is to describe and predict changes in the Earth's environment and to conserve and manage the Nation's coastal and marine resources to ensure sustainable economic opportunities. NOAA implements its mission through its line and staff offices: the National Ocean Service (NOS); the National Marine Fisheries Service (NMFS); the Office of Oceanic and Atmospheric Research (OAR); the National Weather Service (NWS); the National Environmental, Satellite, Data and Information Service (NESDIS); the Office of Marine and Aviation Operations (OMAO); Facilities; and Corporate Services (CS). The following chart illustrates the distribution of NOAA's Budget Request among these offices.



FY 2003 Budget Request by Line Office



Today, the Nation and the world look to NOAA to provide timely and precise weather forecasts that protect lives and property; to manage fisheries and protected species; to promote and sustain healthy coastlines; to make America more competitive through safe navigation; to examine changes in the oceans; and to inspire and create approaches that will protect and keep our precious natural resources alive for the generations to come.

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 and radars to ships and submersibles – provides critical data and quality information needed for the safe conduct of daily life and the basic functioning of a modern society.



NOAA's products and services include short-term weather and space-weather forecasts, seasonal climate predictions, long-term

global change prognoses, environmental technologies, nautical charts, marine fisheries statistics and regulations, assessments of environmental changes, hazardous materials response information, and stewardship of the Nation's ocean, coastal, and living marine resources.

NOAA's programs for FY 2003 support several key cross-cutting initiatives. These cross-cutting initiatives illustrate the degree to which NOAA's programs are inter-related. Each of the component programs within a cross-cutting initiative uniquely contributes to NOAA's ability to meet its mission.

The FY 2003 President's Budget Request supports the following cross-cutting initiatives, each of which is discussed in greater detail on the following pages:

- 1. People and Infrastructure
- 2. Improving Extreme Weather Warnings and Forecasts
- 3. Climate Services
- 4. Modernization of NOAA Fisheries (NMFS)
- Other Key NOAA Programs: Energy Initiative, Homeland Security, Ocean Exploration, and Coastal Conservation



Line Office/ Strategic Plan	Item	FY 2002 Enacted	Increase/ Decrease	FY 2003 Total
Strategie I lan	People	Lilacteu	Deerease	Totai
NOAA/All goals	Adjustments to Base Costs (all accounts)		[\$129.0]	[\$129.0]
NOAA/All goals	Under Secretary & Associate Offices	21.8	4.0	25.8
C	Subtotal, People	\$21.8	\$4.0	\$25.8
	Infrastructure			
OMAO/AST/ DECCEN	Aircraft P-3 Maintenance	*	\$1.5	\$1.5
	Facilities			
NMFS/BSF	Honolulu Facility	\$3.0	\$12.0	\$15.0
PS/All Goals	Western Regional Center Building Maintenance	*	0.7	0.7
NWS/ASTWF	Weather Forecast Office Maintenance & Capital Improvements	4.3	3.0	7.3
NESDIS/ASTWF	Suitland Occupancy Costs	0.0	8.9	8.9
PS/All Goals	Safety in NOAA's Facilities	3.2	3.6	6.8
NMFS/BSF	Galveston Renovations	0.0	2.0	2.0
NOS/SHC	Pribilof Islands Cleanup ¹	6.0	4.0	10.0
	Subtotal, Facilities	\$16.5	\$34.2	\$50.7
	Ships			
OMAO/SHC	AGATE PASS (Coastal YTT) Operations & Maint.	\$0.0	\$0.6	\$0.6
OMAO/PSN	FAIRWEATHER Operations & Maintenance	0.0	4.6	4.6
OMAO/PSN	WHITING Repairs	0.0	3.2	3.2
OMAO/All Goals	NOAA Corps	*	0.8	0.8
	Subtotal, Ships	\$0.0	\$9.2	\$9.2
PS/All goals	Information Technology Security	*	\$4.0	\$4.0
-	Subtotal, Infrastructure	\$16.5	\$48.9	\$69.4
	TOTAL	\$38.3	\$52.9	\$95.2

People and Infrastructure

* Some LO funds have been expended in FY 02, however dedicated program funds do not exist.

¹The request does not continue a one-year grant of \$2.0 million to the State of Alaska for new landfills. In FY 2003, the \$2.0 million will be directed towards cleanup activities.

People and Infrastructure \$52.9 Million Increase

The People and Infrastructure cross-cutting initiative brings together the heart of what NOAA is and does. These are the underlying and interconnecting threads that hold NOAA and its programs together. Investments in NOAA's scientific and technical workforce and NOAA's facilities and equipment is essential to the agency carrying on its mission into the 21st Century. "People and Infrastructure" is about investing in the future.

People \$4.0 Million Increase

Adjustments-to-Base (ATB): NOAA requests \$129.0 million in base adjustments that are critical to preserve and develop NOAA's human capital, our greatest asset.² In a budget totalling over \$3.3 billion, this represents 4 percent of our total resources and 13.6 percent of NOAA's salaries and benefits. The demand for NOAA's scientific work products and services is expected to increase significantly in FY 2003 and beyond. This trend is evidenced by the demand for accurate seasonal forecasts, severe weather warnings for the protection of life and safety, competing interests for marine resources and the need to protect and recover endangered species. Most recently, NOAA is researching the application of deep-ocean products and their pharmaceutical applications as a result of ocean explorations. Similar increases in demand for NOAA's products and services are expected from the national energy community and other potential user communities. To ensure NOAA's mission capacity is adequate to respond to these demands, NOAA must continue to invest in its people. These products and the demand for new products rely on the creativity and ingenuity of NOAA's workforce. Adequate pay, benefits, and workspace is an essential ingredient to retaining the best and brightest NOAA Team.

This investment will ensure NOAA's programs are maintained at the current services level. Of this amount, \$36.9 million is for pay raises, benefits, inflation, and rent. Failure to receive these adjustments in any given year results in program dislocations and minor cutbacks. Failure to receive these adjustments, over time, has a cumulative erosion effect that can be programmatically devastating. Consequently, these adjustments to NOAA's funding base are essential for NOAA to continue meeting core mission-related requirements and the expectations of the American public. Included in this ATB amount is \$92.2 million for the proposed Civil Service Retirement System (CSRS) legislation that is a transfer from an Office of Personal Management central account to all agency accounts.

Included in this amount is a total of \$36.7 million for payments mandated as an entitlement to OMAO's commissioned officers under 33 U.S.C. 8530, 33 U.S. C. 853 p, and 33 U.S.C. 87-2. Mandatory retirement payments for NOAA Corps will now be paid from the new NOAA Corps Retirement Fund account. A balance of \$1,000,000 for mandatory healthcare benefits for non-Medicare-eligible retired officers now remains in the mandatory account. This shift is due to an Administrative proposal to finance on an actuarially sound basis liabilities under military retirement and survivor benefit programs for NOAA

²The total ATB amount of \$129.0 million is not reflected in the summary chart total because the increases are spread across all NOAA programs. However, Detailed information regarding ATBs is shown in Section 2: Budget Request by Activity - Traditional Structure.

Corps. The President's Budget includes a \$20 million payment from the General Fund for the unfunded liability amortized over 40 years. An increase of \$5 million is requested in the ORF account for discretionary agency contributions for the accruing cost of NOAA Corps retirement benefits. Payments into the new retirement fund of \$20 million (mandatory general fund payment) and \$5 million (discretionary agency contributions) minus mandatory benefit payments of \$16 million leave a balance of \$9 million in the trust fund to cover future benefit costs.

Under Secretary and Associate Offices: NOAA requests an increase of \$4.0 million over the FY 2002 Enacted level for a total of \$25.8 million for the Under Secretary and Associate Offices. This increase will enable the offices to maintain the level of funding necessary to allow the Executive Offices to continue to provide executive management direction concerning NOAA policy and planning objectives; statutory and other legal requirements; Congressional relations; and public and constituent affairs. As part of the FY 2002 restructured budget, NOAA established budgetary limits by office and proposed two fundamental changes. One was to fully appropriate the Under Secretary & Associate Offices so that these budgets are not augmented by corporate costs. This will ensure clarity and continuity in the Under Secretary & Associate Offices spend plans throughout the year. As such, a total of \$2.1 million is required to maintain staffing at the FY 01 Enacted levels. Second, the Office of Federally Coordinated Meteorology (OFCM) was incorporated in these plans for a total of \$1.1 million. Both of these structural changes were funded by realigning appropriations from Policy Formulation and Direction and the National Weather Service (NWS) in FY 2002. The reductions were adopted but the corresponding increases were not. This increase requests restoration of this FY 2002 reduction. The remaining \$1.1 million is requested to fund normal adjustments to base and support the CSRS legislative proposal.

Infrastructure \$48.9 Million Increase

NOAA's facilities and information technology infrastructure directly and immediately impact the ability of NOAA's program offices to satisfy mission demands. The condition, readiness and vulnerabilities of this infrastructure have direct consequences on human welfare, economic well being, and the advancement of the state of the sciences. To ensure mission capacity, NOAA requests infrastructure funding in the following key categories: critical systems, construction, maintenance and repair, and NOAA program support. The following programs are included in this crosscut:

Aircraft \$1.5 Million Increase

Aircraft P-3 Maintenance: NOAA requests a total of \$1.5 million for NOAA aircraft operated by the Office of Marine and Aviation Operations (OMAO). This continued investment will allow OMAO to operate NOAA's fleet of 13 aircraft and provide a Standard Depot Level Maintenance (SDLM) for the Lockheed WP-3D aircraft N42RF. The SDLM is a scheduled, periodic maintenance program required every four years for the WP-3D aircraft as recommended by the manufacturer to maintain airworthiness. Without the SDLM, the aircraft will be grounded, leaving only one P-3 available for hurricane reconnaissance, research, surveillance, West Coast storm research and air chemistry research, which would negatively impact these activities.

Facilities \$34.2 Million Increase

Honolulu Facility: NOAA requests an increase of \$12.0 million over the FY 2002 Enacted level for a total of \$15.0 million to continue efforts to replace the Honolulu Laboratory. Compliance with current building code and disability standards continues to be a serious concern. This funding will enable the project to proceed with some needed work to correct several deficiencies, such as overcrowding, lack of laboratories, and inadequate or nonexistent handicapped access.

Western Regional Center Building Repair: NOAA requests a total of \$702,000 for

Western Regional Center Operations and Maintenance. These funds will be used to support operation and maintenance expenses at the Western Regional Center (WRC) in Seattle, Washington. The complex currently is falling into a state of disrepair. The WRC budget has been flat-lined for 11 consecutive years. During this period, costs have escalated for the increased needs for maintenance activities due to normal facility aging, unanticipated and unfunded requirements in environmental and other regulatory areas, and much higher than anticipated increases in energy and other utility costs.

Weather Forecast Office (WFO) Capital Improvements: NOAA requests an increase of \$3.0 million over the FY 2002 Enacted level for a total of \$7.3 million for WFO Capital Improvements. This continued investment will allow NWS to fund recurring maintenance contracts and continue to address a backlog of over \$10 million in deferred maintenance repair actions. In FY 2003, the National Weather Service will begin implementation of a scheduled preventive facility maintenance program based on manufacturers' specifications and GSA/industry standards. Funds will also be dedicated to begin cyclical replacements and to address high priority backlog repair actions at 20 WFOs. The WFOs provide forecasters with modernized facilities, supporting the advanced technology systems and the provision of weather service to the public. As the WFOs continue to age, the facilities require a significant investment in recurring and cyclic maintenance, including replacement of major facility support systems such as power backup generators and uninterruptable power supplies. The request will allow NWS to protect the \$250 million capital investment in modernized facilities in accordance with GSA and private industry standards.

Suitland Occupancy Costs: NOAA requests a total of \$8.9 million in FY 2003 to continue this critical infrastructure initiative to replace the NOAA Satellite Operations Facility in Suitland,

Maryland. NOAA requires the FY 2003 funding to purchase long-lead items related to the occupancy and use of the new building and to sustain the continuity of critical National

satellite operations during the relocation of NOAA activities. The new NOAA Satellite Operations Facility will be fully capable of meeting NOAA critical infrastructure high technology requirements, which use more than \$50 million in advanced equipment to operate \$4.5 billion in satellite assets. The facility will allow for 24 hours per day, 365 days per year capability and will posses the necessary redundant electrical, mechanical, and plumbing systems required to eliminate the existing risk of mission

disruption and failure and the risks to employee health and safety. NOAA's total cost to complete this project is \$36.1 million, of which appropriations, not including this request, of \$17.8 million have been provided.

Safety in NOAA's Facilities: NOAA requests an increase of \$3.6 million above the FY **2002 Enacted level for a total request of \$6.8 million for improving the safety in NOAA's Facilities.** This continued investment will allow Facilities to pursue the elimination of numerous health and safety issues related to the poor condition of NOAA's facilities. These funds will address NOAA's current

backlog of projects, which totals more than \$65 million, and will begin the establishment of a focused NOAA safety program. These funds provide for major repairs, renovations and alterations to NOAA facilities. NOAA will use these funds to identify and correct deficiencies in those facilities, to include needed major and minor repairs, renovations and alterations, and provide limited construction of "like" replacement space. Scientists' abilities to perform advanced research has been constrained in some cases by obsolete and inadequate laboratory facilities.

Galveston Renovations: NOAA requests a total of \$2.0 million to continue rehabilitation of the Galveston, Texas, fishery laboratory. Funds requested will complete mechanical work required on Building 306, which will house 25 fishery scientists, technicians, and observers. This request will also partially complete worked required on Buildings 304 and 305, which will include badly needed conference and storage facilities. Building 306 is in danger of collapse and is currently not occupied. Therefore, personnel have been relocated into laboratory facilities resulting in severely reduced capacity for fisheries research and chemical analyses. Including this request, \$6.3 million has been provided for this project to date.

Pribilof Islands Cleanup: NOAA requests an increase of \$4.0 million over the FY 2002 Enacted level for a total of \$10.0 million for the Pribilof Islands Cleanup. The request does not continue a one-year grant of \$2.0 million to the State of Alaska for new landfills. In FY 2003, the \$2.0 million will be directed toward cleanup activities. This continued investment will enable NOAA to continue restoration work on the Pribilof Islands. The environmental cleanup includes treating petroleumcontaminated soils, continuing actions related to the closure of the existing landfill, and remediation at various sites and the NOAA portion of an oil-drum dump site. Under P.L. 104-91 and the "Two-Party Agreement" between NOAA and the State of Alaska, NOAA is responsible for an extensive environmental cleanup on the islands in preparation for transfer of Federal lands on the islands to the local communities. The specified cleanup activities will be undertaken primarily through grants or other agreements with qualified contractors and/or local entities and residents of the Pribilof Islands.

Ships \$9.2 Million Increase

AGATE PASS (Coastal YTT) Operations & Maintenance: NOAA requests a total of \$600,000 for operation and maintenance of AGATE PASS (Coastal YTT), an ex-Navy vessel recently acquired and being converted to replace FERREL. The requested funds will allow AGATE PASS to provide up to 30 additional Days-At-Sea above the vessel it is replacing. When fully outfitted, the modified vessel will be a multi-purpose vessel capable of supporting diverse coastal research needs.

FAIRWEATHER: NOAA requests \$4.6 million for operations of NOAA ship

FAIRWEATHER. FAIRWEATHER is currently being refurbished and will be reactivated in Spring 2003. Of the requested funds \$4.1 million will allow NOAA to operate FAIRWEATHER for 130 days-atsea (DAS) in FY 2003. These 130 DAS will be used to acquire an additional 350 square nautical miles (snm) of hydrographic data in Alaska in FY 2003. This request addresses the hydrographic survey backlog and fully supports the Update Nautical Surveys objective of the NOAA Strategic Plan Goal to Promote Safe Navigation and the recommendations for more hydrographic surveys in the 1999 Marine Transportation System Report to Congress. The remaining \$450,000 is requested for maintenance of FAIRWEATHER. After refurbishment is completed, funds are needed to cover contracts for routine maintenance and spare parts.

WHITING Repairs: NOAA requests a total of \$3.2 million for repairs on the NOAA ship

WHITING. This vessel is a 38-year-old survey vessel operating on the East Coast and has never had a major rehabilitation. The requested funds will provide major repairs and upgrades to obsolete systems, machinery, and mission electronics. It is anticipated that the repairs will extend the useful life of WHITING by approximately 6-10 years. It will also enhance productivity, recruitment and retention of crew, and safety of operations at sea.

NOAA Corps: NOAA requests a total of \$815,000 to recruit and train 15 additional NOAA Corps officers for duty on board NOAA's platforms. Authorizing language allows up to 299 officers, and the requested funds will bring the Corps strength to 254. NOAA requires these additional officers for the operation of NOAA ships and aircraft and to fill billets (positions) within NOAA's programs. With some of the NOAA Corps officers serving in shore billets, there is a need for additional officers to relieve officers already at sea. This enhancement allows parity with other U.S. uniformed services in the amount of time officers remain on sea duty, a requirement to retain staff and remain competitive with other services. Training for these officers is also funded in this increase.

Information Technology Security \$4.0 million Increase

Information Technology (IT) Security: NOAA requests a total of \$4.0 million for a comprehensive, enterprise-wide approach to IT security through a balanced approach of better planning, increased support, integrated NOAA-wide training, as well as technical solutions in hardware and software. This initiative focuses on both providing direct and immediate protection and developing the foundation technology needed so that NOAA can continuously improve service delivery through electronic commerce. While all IT programs require built-in IT security, many measures are only effective if done NOAA-wide, and many measures can be implemented one time, NOAA-wide, saving programs the costs and resources of duplicating security functions. NOAA will spend approximately \$17 million on basic IT security programs in FY 2003, which will be handled through internal funding measures.

Line Office/		FY 2002	Increase/	FY 2003
Strategic Plan	Item	Enacted	Decrease	Total
	OAR			
OAR/ASTWF	Tornado Severe Storm Research	*	\$1.0	\$1.0
OAR/ASTWF	U.S. Weather Research Program	2.8	1.0	3.8

Improving Extreme Weather Warnings and Forecasts

OAR/ASTWF	Weather & Air Quality Research Labs	43.9	4.2	48.1
	Subtotal, OAR	\$46.7	\$6.2	\$52.9
	NWS			
NWS/ASTWF	Advanced Hydrological Prediction Service	\$1.5	\$4.7	\$6.2
NWS/ASTWF	Weather & Climate Supercomputing	15.0	6.2	21.2
NWS/ASTWF	Radiosonde Replacement	5.0	2.0	7.0
NWS/ASTWF	Aviation Weather	0.0	2.5	2.5
NWS/ASTWF	Huntsville Weather Forecast Office	0.0	1.4	1.4
	Subtotal, NWS	\$21.5	\$16.8	\$38.3
	NESDIS			
NESDIS/ASTWF	Polar Orbiting Systems	\$295.9	\$64.3	\$360.2
NESDIS/ASTWF	Polar K-N'	[138 5]	[(15 6)]	[122 9]
NESDIS/ASTWF	National Polar-orbiting Operational Earth	[150.5]	[(13:0)]	[237 3]
	Satellite System (NPOESS)	[]	[,,,,]	[]
NESDIS/ASTWF	Geostationary Systems	262.5	(35.1)	227.4
NESDIS/DECCEN	EOS Data Archive & Access System Enhancement	*	3.0	3.0
NESDIS/ASTWF	Joint Center for Data Assimilation	0.8	2.6	3.4
NESDIS/ASTWF	Coastal Ocean Remote Sensing	0.0	6.0	6.0
NESDIS/ASTWF	Satellite CDA Facility	3.6	1.0	4.6
NESDIS/ASTWF	Satellite Command & Control	30.4	4.4	34.8
NESDIS/ASTWF	Product Process & Distribution	21.0	6.7	27.7
	Subtotal, NESDIS	\$614.2	\$52.9	\$667.1
	ΟΜΑΟ			
ΟΜΑΟ/Αςτωνε	G IV Instrumentation	0.0	Q /	Q /
	Subtotal OMAO	0.0	0.4 Q 4	0.4 Q 1
	Subiotal, OMAO	0.0	0.4	0.4
	TOTAL	\$682.4	\$84.3	\$766.7

* Some LO funds have been expended in FY 02, however dedicated program funds do not exist.

Improving Extreme Weather Warnings and Forecasts \$84.3 Million Increase

Critical to meeting our 21st Century mission is the continuity of NOAA's Satellites and Severe Weather Forecasts. In order to ensure our success, the FY 2003 President's Budget Request includes an increase request of \$94.6 million for a total of \$798.6 million. The programs that comprise this initiative are summarized in the preceding table and the program descriptions below.

OAR \$6.2 Million Increase

Tornado Severe Storm Research: NOAA requests a total of \$1.0 million to develop new technologies for forecasting and detecting tornadoes and other forms of severe weather and to disseminate this information to emergency managers, the media, and the general public for appropriate action. This initiative consists primarily of the construction and research support for a phased array radar test-bed at the National Severe Storms Laboratory in Norman, OK. Congress established a joint Research & Development program for NOAA, the Department of Defense (DOD) and the Federal Aviation Administration (FAA) to investigate the feasibility and benefits of using these military phased array radars for improving severe weather forecast and warning systems. U.S. Navy SPY-1 Phased Array Radar (PAR) technology holds considerable promise for making significant improvements to the existing WSR-88D system. Phased array radar has the potential to significantly extend lead times for tornadoes and other forms of severe and hazardous weather. Faster scan rates can reduce the time it takes to make a complete Doppler radar observation from six to nearly one minute. Coupled with advanced decision support systems, in the future, tornado lead times could be almost doubled from 10 to 22 minutes.

US Weather Research Program (USWRP): NOAA requests an increase of \$1.0 million over the FY 2002 Enacted level for a total of \$3.8 million to support the transition of research and development into operations in order to reach the USWRP initial goals of improving forecasts of inland heavy precipitation associated with landfalling hurricanes. The increase will be used to address the improvement of the forecasts of heavy and, often, flood-producing rains associated with hurricanes and tropical storms as they move inland. To address this goal, initial investments will be made in improving atmospheric boundary layer observations along the coast and inland, regional and fine scale modeling, and model test and evaluation.

Weather & Air Quality Research Labs: NOAA is requesting an increase of \$4.2 million over the FY 2002 Enacted level for a total of \$48.1 million to recapitalize the 10 laboratories that conduct weather and air quality research, which includes \$0.4 million for ongoing operational scientific activities to continue operation of the Wind Profiler Network and NOAA's Space Weather Program. The Wind Profiler Network provides the NWS wind, temperature, and other surface meteorological measurements for use in tailoring weather forecast model guidance to local conditions for issuance of forecasts, watches and warnings of severe weather. This funding will go toward replacement parts and computer network maintenance to keep the Wind Profiler Network operational. NOAA's Space Environment Center (SEC) is solely responsible for data assimilation and forecasting for NOAA's Space Weather program. The Center is responsible for the quality and quantity of space-weather observations from NOAA and NASA satellites, and ingesting, processing, verifying, storing, and disseminating critical data from other agencies through its operational system. This funding will allow the SEC to improve its forecasts by incorporating the new data from NOAA and NASA satellites into its forecasts.

NWS \$16.8 Million Increase

Advanced Hydrological Prediction Service (AHPS): NOAA requests an increase of

\$4.7M over the FY2002 Enacted level for a total of \$6.2M to accelerate nationwide implementation of improved flood and river forecasts services in the Northeast, Middle Atlantic, and Southeast, including the states of: New Hampshire, Vermont, Virginia, North Carolina, and South Carolina. As implemented, AHPS will: 1) produce new information with better predictions of river height and flood potential to reduce loss of life and property; 2) deliver high resolution, visually oriented products to provide partners and customers with valuable information for life decisions; 3) refresh aging hydrologic forecasting infrastructure to support rapid infusion of scientific advances; and 4) leverage NOAA's investments in observational systems and atmospheric models to enhance accuracy and resolution of river forecasts. AHPS recently demonstrated improvements in flood forecasting for the Red River of the North. The mid-March, 2001 AHPS 90 day outlook showed an 85% chance Fargo, ND would experience major flooding. Three weeks later the Red River was at 20 feet above flood stage in Fargo.

Weather & Climate Supercomputing: NOAA requests an increase of \$6.2 million over the FY 2002 Enacted level for a total of \$21.2 million to continue operations and maintenance of the current NWS IBM SP system (Class VIII) and to transition the next generation weather and climate supercomputing system into operations (system to be acquired and installed during FY 2002). The NWS supercomputer is the foundation for all NWS weather and climate forecasts. Operational transition of the next generation supercomputer will enable the NWS to improve the resolution and forecast accuracy of the following prediction models by FY 2004: global model from 80Km to 52Km; regional model from 12Km to 10Km; and the hurricane model from 18Km to 12Km. In addition, this investment will enable the NWS to upgrade its operational climate forecasting model to incorporate ocean temperature and current influences critical to predicting weaker El Niño and La Niña events and other climate oscillations.

Radiosonde Replacement: NOAA requests an increase of \$2.0 million over the FY 2002 Enacted level for a total of \$7.0 million to continue the replacement and modernization of the upper air radiosonde network. The radiosonde network provides critical upper air observations for NWS weather forecasters and serves as the principle data source for all weather forecast models. The current network is obsolete and nearing collapse, risking widespread loss of data within the next two to three years. During FY03, the NWS will accelerate system deployment of radiosonde telemetry units with 21 sites vs. 12 sites (at \$5.0 million level); and begin use of Global Positioning System (GPS) technology radiosondes at sites as they become operational. This represents 21% of the total inventory of radiosonde units that need replacement by FY 06.

Aviation Weather: NOAA requests a total of \$2.5 million to initiate a 7-year plan to help improve U.S. aviation safety and economic efficiencies by providing state-of-the-art weather observation and forecast products responsive to aviation user needs. Weather accounts for over 70% of all air traffic delays which results in greater expenditures by both airline customers and the airlines. In addition, an average of 200 general aviation pilot fatalities per year are caused by weather-related accidents across the U.S. This initiative will provide a means for the NWS to improve its aviation weather forecast services through 3 major components which include: 1) increasing the number and quality of aviation weather observations; 2) transitioning successful applied research efforts to operational products; and 3) developing and implementing new training programs for forecasters, pilots, and controllers. This initiative has the goal of a 10% reduction in National Airspace System weather-related air traffic delays, which would save \$600 million annually in potential economic losses, and a 25% reduction in general aviation weather related fatalities, or 50 lives annually.

Local Warnings and Forecast Base - Huntsville, AL Weather Forecast Office

(WFO): NOAA requests a total of \$1.4 million to pay for recurring operations and maintenance costs at the new Huntsville, AL Weather Forecast Office. The Huntsville WFO will be established in FY 2002 at the University of Alabama at Huntsville using \$3.0 million in appropriated funds provided in FY 2002. The \$1.4 million requested will provide for NWS employee salaries, facilities rent and maintenance, and operational equipment and supplies; all necessary costs to provide and operate and maintain weather forecast and warning services in the Huntsville area.

NESDIS \$52.9 Million Increase

Polar Orbiting Systems: Polar Orbiting Systems is comprised of NOAA Polar K-N and the National Polar Operational Earth Satellite System. The net increase requested is \$64.3 million and described as follows:

NOAA Polar K-N': NOAA requests a decrease of \$15.6 million from the FY 2002 Enacted level for a total of \$122.9 million for the NOAA Polar K-N' to fund the continuation of the production and launch of this series of satellites. NOAA will use these funds to continue the procurement of the NOAA M through N' satellites, instruments, launch services, and ground systems. This request also provides funding for upgrading and replacing aging and deteriorating ground systems to allow for the continuation of operations for the Polar K-N' series through the end of its lifetime. The Polar K-N program is completing major procurement items and therefore does not need to continue the funding levels of previous years.

National Polar-orbiting Operational Environmental Satellite System

(NPOESS): NOAA requests an increase of \$79.9 million over the FY 2002 Enacted level for a total request of \$237.3 million for the continuation of the tri-agency NPOESS program that will replace the NOAA POES program after completion of the current NOAA K-N' series of satellites. The NOAA request represents the NOAA share of the converged NOAA/DoD/NASA program. In FY 2003, funds will be required to continue the development and production of the NPOESS instruments, including the Visible Infrared Image Radiometer, the Conical Microwave Imager Sounder, the Cross-track Infrared Sounder, the Ozone, Mapping and Profiler Suite, the Global Positioning System Occultation Sensor, and the Space Environmental Sensing Suite. The continued development of these instruments is critical for their timely and cost effective delivery to replace both the Defense Meteorological Satellite Program (DMSP) and the NOAA POES spacecraft when needed.

FY 2003 funds are also required to fund the first full year of the spacecraft Engineering and Manufacturing Development phase of the NPOESS program, including total system architecture trades and design of the four major NPOESS segments; Space; Interfaced Data Processor; Command, Control, and Communications; and Launch Support. Funding will also support site surveys, environmental mitigation studies, and initiating construction of antenna systems at high latitude mission recovery sites to support data acquisition functions for the NPOESS Preparatory Project (NPP). The NPP ground system must be in place to support the FY 2005 launch of the NPP spacecraft, which is a major element of the risk reduction necessary for the successful initiation of the operational use of NPOESS, with the first NPOESS satellite available for launch in FY 2008 when the last of the POES satellites is launched.

Geostationary Operational Environmental Satellite (GOES): NOAA requests a decrease of \$35.1 million from the FY 2002 Enacted level for a total request of \$227.4 million to support continued post launch requirements for GOES I-M; the continued procurement of the GOES-N series satellites, instruments, ground systems, and systems support necessary to maintain continuity of Geostationary operations; and planning and development for the GOES-R series of satellites and instruments. This decrease represents a program change resulting from the successful launch of GOES M, and the continued success of the GOES I-M series.

Earth Observing System Data Archive & Access System Enhancement: NOAA requests a total of \$3.0 million to ensure that NOAA possesses the ability to fully utilize the vast amounts of new satellite-based environmental data becoming available, process and distribute that data in a variety of formats, provide stewardship for the data, and make the data accessible to users in a variety of economic, research, government, and public sectors. NOAA will use the requested funds to procure additional media storage hardware and telecommunications equipment that NOAA requires to store the environmental data generated by the 100-times increase in data volume per satellite that has already begun and will only increase in future years.

Joint Center for Data Assimilation: NOAA requests an increase of \$2.6 million over the FY 2002 Enacted level for a total of \$3.4 million for the Joint Center for Satellite Data Assimilation. NWS, the NOAA Office of Atmospheric Research, and NASA also provide funding as partners in this coordinated national effort to more fully realize the potential of the vast quantities of new satellite data that are becoming available.

In the next few years, there will be an explosive growth in the number of satellite instruments capable of further improving Numerical Weather Prediction (NWP) accuracy. Additionally, the development of new and powerful mathematical techniques to assimilate the data into NWP models provides further opportunities to improve the accuracy and extend the time range of weather and climate forecasts. The prime benefit of the Joint Center for Satellite Data Assimilation will be improved weather forecasts and warnings, resulting in reduced losses of life and property. NOAA will also realize productivity increases by reducing the average time for operational implementation of data from new satellite technology from two years to one year. With average satellite lifetimes of five years, this represents a 20 percent productivity increase per satellite.

Coastal Ocean Remote Sensing: NOAA requests a total of \$6.0 million to develop and deploy a prototype high-resolution imaging sensor, to meet long-standing NOAA

requirements. In FY 2003, this initiative will allow NOAA to work with NASA to develop conceptual design and capabilities of this instrument, which will continuously monitor coastal ocean areas for harmful algae blooms, coral reef deterioration, pollution changes, fisheries management, and navigation. This instrument will provide continuous, high resolution monitoring in unprecedented detail of terrestrial features such as vegetation changes, flooding, wild fires, volcanic eruptions, and ash cloud transport. Additionally, this initiative will support joint NOAA/NASA scientific research required for the development of real-time products in support of coastal health and management. The overall outcome of this program will be significant economic benefits to the tourist industry, hotel and motel suppliers, commercial fisheries, and local governments.

Satellite Command & Data Acquisition (CDA) Facility: NOAA requests an increase of \$1.0 million over the FY 2002 Enacted level for a total request of \$4.6 million in FY 2003 PAC Construction account to continue the Satellite CDA Infrastructure program. The Satellite CDA Infrastructure program is critical to ensure the current 99.9 percent data availability from NESDIS satellite systems. Improved facilities reduce the risk of outages and service disruptions caused by failure of the supporting buildings, facilities, and infrastructure. This program minimizes the risk of spacecraft loss and data loss and provides NOAA with the capability, redundancy, and robustness within its satellite command and data acquisition system infrastructure to continue supporting worldwide requirements for critical operational satellite data and services. Not fully funding these requirements threatens the operating integrity of the CDA Stations and raises the risk to civilian and military missions supported by NOAA and increases the risk of failure of the CDA Station operating systems at a time when events in the world may pose increased risk of loss of life and property.

Satellite Command and Control: NOAA requests an increase of \$4.4 million above the FY 2002 Enacted level for a total of \$34.8 million in FY 2003. This includes a program increase of \$2.5 million for Satellite Command and Control. This investment supports the operations of the NESDIS satellite systems, the ingesting and processing of satellite data, and the development of new product applications required for continuity of operations. NESDIS provides satellite command and control services on a 24 hours per day, 365 days per year schedule. Two critical components of this initiative are:

Protecting Critical Satellite Control Facilities: NOAA requests a program increase of \$0.3 million to enhance security at the Fairbanks, Alaska and Wallops, Virginia satellite Command and Data Acquisition ground stations. NOAA will use the requested funds to upgrade and expand security lighting along the access road, around buildings and antennas, and along exterior cableways. NOAA will also convert to energy efficient light heads, install time-of-day, prevailing light level, and motion activated controls to minimize energy use and maximize utility.

Satellite Command and Data Acquisition Station Operations: NOAA requests a program increase of \$2.2 million in the NESDIS ORF account to provide funding for the operation of the Satellite Command and Data Acquisition (CDA) in Fairbanks, Alaska. NOAA will use the FY 2003 funds to obtain the appropriate technical, management, and administrative contractor support to operate and maintain the acquisition and throughput of data from NOAA and DoD polar-orbiting satellites to the NOAA Satellite Operations Control Center in Suitland, Maryland and National Weather Centers.

Product Processing and Distribution: NOAA requests an increase of \$6.7 million above the FY 2002 Enacted level for a total request of \$27.7 million. This includes a program increase of \$5.1 million for the Product Processing and Distribution program. This continued investment will be used to process and analyze data from NOAA, DoD, and other Earth-observing satellites; supply data, interpretations, and consulting services to users; and operate and maintain the Search and Rescue mission control center. This includes supplying satellite data that makes up approximately 85 percent of the data used in NWS numerical weather prediction models. NOAA will use the requested program increase to support the following two mission critical functions: Reducing the Risk to Continuity of Critical Operations: NOAA requests a program increase of \$3.1 million to reduce the risk of losing the continuity of critical satellite product processing and distribution capabilities. NOAA will use the requested funds to expand on-site maintenance and staffing levels to ensure that all critical functions are performed, providing vital and timely information to customers and operations during times of peak workload. NOAA will also develop and update documentation for all critical systems and operations, review security procedures for all ground processing system components, and initiate improved operating procedures and training.

Improved Support for Weather and Hazards: NOAA requests a program increase of **\$2.0 million to improve weather and hazards product processing and distribution.** As a part of this initiative, NOAA will automate wild fire detection algorithms to improve timely delivery of information to customers, integrate the information into geographic information systems for detailed location information, and integrate new fire detection sensors from non-NOAA satellites.

OMAO \$8.4 Million Increase

G-IV Instrumentation: NOAA requests a total of \$8.4 million to begin upgrading instrumentation aboard the G-IV aircraft. Improvements in NOAA's Gulfstream IV aircraft's remote-sensing systems will enhance NOAA's hurricane-reconnaissance capability. New technology will use remote sensors to develop 3-dimensional profiles of hurricanes from 45,000 feet down to the surface and would provide forecasters with unprecedented real-time information on size and intensity. In addition, radar-composite maps will provide critical rainfall information that is crucial to forecasters and to the emergency-management community for preparedness and evacuations.

Line Office/ Strategic Plan	Item	FY 2002 Enacted	Increase/ Decrease	FY 2003 Total
OAR/DECCEN	Climate Observations and Services	\$23.6	\$18.0	\$41.6
OAR/DECCEN	Arctic Research (SEARCH)	*	2.0	2.0
OMAO/DECCEN	University National Oceanographic Laboratory System (UNOLS)	*	2.5	2.5
OAR/DECCEN	Climate Monitoring and Ocean Observations	49.2	5.4	54.6
NESDIS/SI	Archive, Access & Assessment	28.3	8.3	36.6
	Subtotal, Climate Services	\$101.1	\$36.2	\$137.3
	TOTAL	\$101.1	\$36.2	\$137.3

Climate Services+

+ This chart reflects services and observation products and is a subset of the approximate \$240 million investment NOAA spends on climate per year.

* Some LO funds have been expended in FY 02, however dedicated program funds do not exist.

Climate Services \$36.2 Million Increase

The Challenge

From the storms of next week to the drought of next season to the potential human-induced climate change over the coming century, issues of climate variability and change will continue to be a major issue for the Nation. Whether responding to the ongoing drought in the Pacific Northwest and its effect on power generation and endangered salmon, or in determining how much atmospheric carbon dioxide is taken up by the North American biosphere, these questions influence users from the Western water manager to the shapers of national policy. The challenge is to extend the research successes, maintain the observational backbone, and improve the capability to provide useful information services to our customers. Improved climate predictions will enable resource managers in climate sensitive sectors such as agriculture, water management, and energy supply to alter strategies and reduce economic vulnerability. Building on the understanding of the Earth's climate system that has resulted from the Nation's strong scientific research and numerical modeling programs, NOAA's Climate Observations and Services Program will begin the transition of research data, observing systems and understanding from experiments to applications, and from basic science to practical products.

NOAA's Role

NOAA maintains a balanced program of focused research, large-scale observational programs, modeling on seasonal-centennial time scales, and data management. In addition to its responsibilities in weather prediction, NOAA has pioneered in the research and operational prediction of climate variability associated with the El Niño Southern Oscillation (ENSO). With agency and international partners, NOAA has been a leader in the assessments of climate change, stratospheric ozone depletion, and the global carbon cycle. NOAA scientists have been leaders internationally in the Intergovernmental Panel on Climate Change (IPCC). It maintains national coordination through participation in the U.S. Global Change Research Program.

The agency-wide Climate Observations and Services activity represents a partnership that allows NOAA to facilitate the transition of research observing and data systems and knowledge into operational systems and products. During recent years, there has been a growing demand from emergency managers, the private sector, the research community, decision-makers in the United States and international governmental agencies and the general public to provide timely data and information about climate variability, climate change and trends in extreme weather events. The economic and social need for continuous, reliable climate data and longer-range climate forecasts has been clearly demonstrated. NOAA's Climate Services Initiative responds to these needs. The following efforts will be supported by this initiative:

Climate Change Research Initiative: NOAA requests a total of \$18.0 million for the

Climate Change Research Initiative.

Background: In his June 11 speech in the White House Rose Garden, President Bush announced the establishment of the U.S. Climate Change Research Initiative (CCRI). Among the components of the CCI are commitments to study areas of scientific uncertainty and to identify priority areas where investments can make a difference. In line with recent recommendations by the National Academy of Sciences, the CCRI promotes a vision focused on the effective use of scientific knowledge in policy and management decisions, and continual evaluation of management strategies and choices. The following sections describe NOAA's request to address key priorities of the CCRI.

- C Climate Modeling Center: NOAA requests \$5.0 million to establish a climate modeling center within the Geophysical Fluid Dynamics Laboratory (GFDL) at Princeton, New Jersey, which will focus on model product generation for research, assessment and policy applications as its principal activity. GFDL has played a central role in climate research, pioneering stratospheric modeling, seasonal forecasting, ocean modeling and data assimilation, and hurricane modeling. This core research capability will be enhanced to enable product generation and policy related research.
- C Global Climate Atmospheric Observing System: NOAA requests \$4.0 million to work with other developed countries to reestablish the benchmark upper-air network, emphasizing data sparse areas, and place new Global Atmosphere Watch stations in priority sites to measure pollutant emissions, aerosols, and ozone, in specific regions.
- C Global Ocean Observing System: NOAA requests \$4.0 million to work towards the establishment of an ocean observing system that can accurately document climate scale changes in ocean heat, carbon, and sea level changes.
- C Aerosols-Climate Interactions: NOAA requests \$2.0 million to contribute to the interagency National Aerosol-Climate Interactions Program (joint with NASA, DOE, NSF) currently under development. Specifically, NOAA will establish new and augment existing in-situ monitoring sites and conduct focused field campaigns to establish aerosol chemical and radiative properties. In collaboration with the NPOESS Integrated Program Office (IPO), NOAA will advance the development of the NPOESS planned satellite measurement capabilities.
- C Carbon Monitoring: NOAA requests \$2.0 million to augment carbon monitoring capabilities in North America as well as observations of globally relevant parameters in key under-sampled oceanic and continental regions around the globe, selected to reduce high uncertainty in current flux estimates.
- C Regional Integrated Science Assessments Program (RISA): NOAA requests \$1.0 million for the Regional Science Integrated Assessments Program. Working with the National Science Foundation (NSF), NOAA will augment its research capability in assessing climate change impacts vulnerability by utilizing the research on "decision making in the face of uncertainties" in the framework of the RSIA programs, e.g. Pacific Northwest.

Arctic Research: NOAA requests a total of \$2.0 million in support of the Study of Environmental Arctic Change (SEARCH) to improve monitoring of the elements of the Arctic environment. NOAA's SEARCH activities are part of a coordinated interagency and international program, begun in response to evidence of an alarming rate of environmental change occurring in the Arctic. This initiative consists of improving detection of environmental Arctic change at the air/ice/ocean interface, improving detection of environmental Arctic change in the lower and upper atmosphere, and analysis of Arctic measurements made by NOAA satellites. The SEARCH initiative will substantially increase understanding of long-term trends in temperature, precipitation and storminess across the U.S., with potential improvements in forecasting and planning for energy needs, growth seasons, hazardous storm seasons and water resources. Improved detection of change at the Arctic air/ice/ocean interface will provide oceanographic information critical to management of high latitude fisheries, marine mammals and other protected species.

University-National Oceanographic Laboratory System (UNOLS): NOAA requests a total of \$2.5 million to outsource with UNOLS and other sources for ships in the Pacific to support long-time series research for Fisheries-Oceanographic Coordination Investigations (FOCI), VENTS, and Oregon/Washington Groundfish Habitat and maintenance of the Tsunami moorings in the Gulf of Alaska and Pacific Ocean. The increase will enable NOAA to continue to meet research requirements in the Pacific Ocean, Gulf of Alaska, and Bering Sea utilizing time aboard UNOLS and other vessels. This will provide 125 operating days and allow the NOAA ship RONALD H. BROWN to meet NOAA research needs in the Atlantic Ocean in FY 2003.

Climate Monitoring and Ocean Observations: NOAA requests an increase of \$5.4 million over the FY 2002 Enacted level for a total of \$54.6 million to recapitalize the 10 laboratories that conduct climate research, which includes \$0.6 million for purchasing equipment and improving the scientific activities that contribute to the long-term observing systems that directly support the President's climate initiative. These observing systems are the Global Ocean Observing System (GOOS); the Global Air Sampling Network and a gas network at four baseline observatories, and at Niwot Ridge, CO; and the Tropical Atmosphere Ocean (TAO) array which is the cornerstone of the El Niño/Southern Oscillation (ENSO) Observing System and other ocean observing systems.

Archive, Access, and Assessment: NOAA requests an increase of \$8.3 million above the FY 2002 Enacted level for a total request of \$36.6 million for the Archive, Access, and Assessment program. This includes a program increase of \$5.4 million for the following activities:

Regional Climate Services & Assessments: NOAA requests \$1.8 million to develop an improved climate data and information delivery service that will be nationally coordinated, but regionally distributed, eventually building toward services delivered nationally, regionally, and

locally through state programs. The requested funding will allow NOAA to improve national, regional and state linkages and make national, regional, state, and local weather and climate observing systems and data bases accessible in a timely manner

Next Generation Environmental Information: NOAA requests \$1.6 million to develop a new generation of World Wide Web accessible climate information and statistics for primary use by the energy sector of our economy. This funding will allow NOAA to overhaul the current methods and procedures for computing climate information such as heating and cooling degree days, heat indices, wind chills, freezing degree days, and other related statistics with the goal of making this information more appropriate and timely for business decision-making and planning purposes.

World Ocean Database: NOAA requests an increase of \$1.3 million to update the World Ocean Database to include new sources of data and to put in place the analytical and data management infrastructure needed to transition this activity from the current research mode to a sustained, operational service mode. The funding will also provide for the systematic maintenance and needed updates to the database to include emerging international sources of new data.

Extending America's Climate Record - Paleoclimatology: NOAA requests \$500,000 for the NOAA Paleoclimatology program. NOAA will use the funds to gather key paleoclimatic records to fill gaps; reconstruct climate records during pre-instrumental periods; and produce blended data sets that integrate instrumental, historical, and paleoclimatic data into a holistic climate record.

Solar X-ray Imager Archive: NOAA requests \$200,000 to establish a long-term Solar X-ray Imager (SXI) archive. NOAA will use the SXI archive to derive new products to help reduce the effects of extreme space weather events on telecommunications satellites, on electrical power services, and on health risks to astronauts.

Modernization	of NOAA	Fisheries
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Line Office/		FY 2002	Increase/	FY 2003
Strategic Plan	Item	Enacted	Decrease	Total
	Science			
OMAO/BSF	Fisheries Research Vessel	\$5.4	\$45.5	\$50.9
NMFS/BSF	Modernize Annual Stock Assessments	2.0	9.9	11.9
NMFS/BSF	Sea Turtle Research	4.5	2.0	6.5
NMFS/BSF	Columbia River Biological Opinion Implementation	*	12.0	12.0
NMFS/BSF	Recovery of Endangered Large Whales	*	1.0	1.0
NMFS/BSF	Socioeconomics	2.5	1.5	4.0
NMFS/BSF	National Observer Program	14.1	2.9	17.0
	Subtotal, Science	\$28.5	\$74.8	\$103.3
	Management			
NMFS/BSF	NMFS National Environmental Policy Act (NEPA)	5.0	3.0	8.0
NMFS/BSF	Regional Fishery Management Councils	14.1	1.9	16.0

NMFS/BSF	Statutory and Regulatory Requirements	*	1.5	1.5
	Subtotal, Management	\$19.1	\$6.4	\$25.5
	Enforcement			
NMFS/BSF	Enforcement	39.3	4.3	43.6
NMFS/BSF	Vessel Management System	2.0	5.4	7.4
	Subtotal, Enforcement	\$41.3	\$9.7	\$51.0
	TOTAL	\$88.9	\$90.9	\$179.8

* Some LO funds have been expended in FY 02, however dedicated program funds do not exist.

Modernization of NOAA Fisheries \$90.9 Million Increase

The FY 2003 President's Budget Request for the National Marine Fisheries Service (NMFS), referred to as "NOAA Fisheries," follows Congressionally enacted levels in FY 2002 and invests in core programs needed for NOAA to meet its mission to manage fisheries, rebuild stocks, and protect endangered species such as sea turtles and whales. NOAA Fisheries modernization funds will be allocated within NMFS to ensure that existing statutory and regulatory requirements are met for fisheries and protected species management programs (including the Magnuson-Stevens Act, National Environmental Protection Act, Endangered Species Act, Marine Mammal Protection Act, and other statutory requirements). In FY 2003, there are sufficient funds for NMFS to meet its statutory and regulatory requirements.

This budget request continues NOAA's effort to modernize NOAA's Fisheries. The Modernization of NOAA Fisheries Initiative encompasses a long-term commitment to improve the NMFS structure, processes, and business approaches to meet its mission of sustaining the Nation's living marine resources and their habitat. In addition to this budget request, the Administration will propose that any reauthorization of the Magnuson-Stevens Fisheries Conservation and Management Act include authority for fishing quota systems within regional fisheries, including transferable quotas, where appropriate. This initiative focuses on improving NMFS' science, management, and enforcement programs and beginning to rebuild its aging infrastructure. These improvements will result in measurable progress in the biological and economic sustainability of fisheries and protected resources. In order to ensure the viability of these modernization efforts, the FY 2003 President's Budget Request includes the following program investments:

Science \$74.8 Million Increase

Fisheries Research Vessel: NOAA requests an increase of \$45.5 million over FY 2002 Enacted level for a total of \$50.9 million for NOAA's second Fisheries Research Vessel (FRV2). This vessel will replace the 39-year old ALBATROSS IV in the North Atlantic. Costs of maintaining the aging ALBATROSS IV for the five years needed to construct the replacement FRV and to allow side-by-side missions for calibration purposes are escalating. Further delays in the startup of construction will jeopardize the continuity of a time-series database required to manage Northeast fisheries. Moreover, replacing the aging fleet is required to provide research platforms capable of meeting increasingly sophisticated data requirements for marine resource management.

Modernize Annual Stock Assessments: NOAA requests an increase of \$9.9 million over the FY 2002 Enacted level for a total of \$11.9 million for modernizing annual stock assessments. Funding will allow NMFS to conform to new national stock assessment standards of data quality, assessment frequency, and advanced modeling. An increase of \$5.1 million is requested to provide for the recruitment and training of stock assessment biologists and supporting staff to produce annual stock assessments that meet the new standard for Federally managed stocks. The request would also add an increment of 260 Fisheries vessel/charter days at sea toward the balance of 3,000 days identified in the NOAA Fisheries Data Acquisition Plan at a cost of \$2.4 million. The initiative includes \$0.9 million for advanced sampling technologies. This element targets improvements in and innovative uses of existing technologies, in including the application of new and advanced sampling systems and

approaches. Also included in this request is \$1.5 million to enhance fisheries oceanography studies, principally, the Fisheries and the Environment program (FATE).

Endangered Species Act Sea Turtle Research: NOAA requests an increase of \$2.0 million over the FY 2002 Enacted level for a total of \$6.5 million to continue the recovery of highly endangered sea turtles. Of the \$2.0 million increase, \$1.4 million is in the Protected Resources Science and Technology line to provide the necessary research to recover highly endangered marine turtles. This program is designed to help us to collect information on biology and habitats and share that information with other range countries. By comparing this information with fisheries efforts, we can also better understand the impact of fisheries on these sea turtle populations. The remaining balance of \$600,000 is requested as part of the Conservation and Management base line item and supports implementation of identified management strategies to reverse population declines, implementation of multi-lateral international agreements, and builds capacity through domestic and international educational and outreach programs.

Columbia River Biological Opinion (BiOp) Implementation: NOAA requests an increase of \$12.0 million to provide for the research, monitoring, and evaluation (RM&E) necessary to continue implementation measures of measures included in the Columbia River Biological

Opinion. The RM&E program will provide the scientific information necessary to assess whether BiOp performance measures are being achieved at 2003, 2005, and 2008 check-ins. This funding also provides for the research needed to address key uncertainties identified in the BiOp in the areas of estuary and near-shore ocean survival, delayed effects related to dam passage, and the effects of hatchery programs on the productivity of naturally spawning fish. Funding for this program is requested under the Protected Resources, Science and Technology (\$10.0 million) and Conservation and Management (\$2.0 million) line items.

Recovery of Endangered Large Whales: NOAA requests an increase of \$1.0 million to provide resources to scientifically determine whether two key endangered whales - humpbacks and bowheads - have recovered and are candidates for delisting. This information will enable NOAA to detect changes in the status of large whales and prevent any long-term irreversible damage to these populations.

Socioeconomics: NOAA requests an increase of \$1.5 million over the FY 2002 Enacted level for a total of \$4.0 million for fisheries socioeconomics programs. Funding will support the on-going development of a multi-year comprehensive social sciences program to support NMFS policy decisions. The approach is 3-tiered, augmenting the integral components of a successful social sciences program which includes staffing (\$0.6 million and 7 FTE); data collection (\$0.5 million); and research activities (\$0.4 million). In combination, the funding will be used to continue addressing shortcomings in economic and social assessments of policy alternatives by improving the economic and social science staff capability, and initiation of data and applied research programs.

National Observer Program: NOAA requests an increase of \$2.9 million over the FY 2002

Enacted level for a total of \$17.0 million for the National Observer Program. Funding will be used to expand the collection of high quality fisheries and environmental data from commercial and recreational fishing vessels to assess impacts on marine resources and fishing communities and to monitor compliance with marine resource laws and regulations. This request will primarily provide for approximately 4,000 observer sea days spread over 11 fisheries, most of which are currently unobserved. In addition, the increase will support improvements in data management; outreach; national coordination of policies and practices; and production of educational materials. Observer funding of \$14.1million for specific fisheries and other areas is also included within the \$17.0 million request.

Management \$6.4 Million Increase

NMFS National Environmental Policy Act (NEPA) Implementation: NOAA requests an increase of \$3.0 million over the FY 2002 Enacted level for a total of \$8.0 million for NMFS NEPA. With the current amount of litigation pending, NMFS must continue to strive to enhance its management of the NEPA process. This funding will provide NMFS with the necessary resources to continue to support agency-wide NEPA activities and will allow NMFS to strengthen its decision-making and documentation process to more fully take advantage of the decision making tools provided by NEPA.

Regional Fishery Management Councils: NOAA requests an increase of \$1.9 million over the FY 2002 Enacted level for a total of \$16.0 million for the Regional Fishery Management Councils. This request will provide needed resources for the Councils to respond to increased workload in developing, implementing, and supporting management measures to eliminate overfishing and rebuild overfished stocks; identify and protect essential fish habitats; reduce fisheries' bycatch to the maximum extent practicable; minimize the impacts of fishing regulations on fishing communities; and to implement programs that result from the next reauthorization of the Sustainable Fisheries Act. These results will be achieved through the development of amendments to and creation of new Fishery Management Plans and regulations and corresponding and supporting international management measures to control fishing activities.

Statutory and Regulatory Requirements: NOAA requests an increase of \$1.5 million to provide for thorough, complete, and timely environmental and economic analyses to NOAA customers and for its recovery programs. Funds will support personnel in all NMFS regions, science centers and headquarters to conduct required data gathering, analysis, and document preparation to assess the impacts of human activities that affect protected species. These include the range of Federal actions, including management of marine fisheries. This funding will also support assessments of the environmental and socioeconomic impacts, costs and benefits of implementing conservation programs for protected species.

Enforcement

\$9.7 Million Increase

Enforcement and Surveillance: NOAA requests an increase of \$4.3 million over the FY 2002 Enacted level for a total of \$39.3 million for Enforcement and Surveillance activities to expand and modernize NMFS' fisheries and protected species enforcement programs. These programs include Alaska and west coast groundfish enforcement, protected species enforcement, state and local partnerships, specialized Magnuson-Stevens investigatory functions, community oriented policing and problem solving, and swordfish/Patagonian toothfish import investigations.

Vessel Management System (VMS): NOAA requests an increase of \$5.4 million for additional support and continued modernization and expansion of the vessel management system (VMS) program. These resources will create a program which will monitor approximately 1,500 vessels and is readily expandible. VMS technology is an invaluable tool for modern fisheries management. It provides outstanding compliance without intrusive at-sea boardings, enhances safety at sea, and provides new tools to managers for real time catch reporting.

Line Office/ Strategic Plan	Item	FY 2003 Total
	Enour	
	Energy	¢ < 1
OAR/ISI	Energy Initiative	\$6.1
PS/All Goals	Energy Management	0.6
NMFS/SHC	Energy Permit Rapid Response	2.0
	Subtotal, Energy	\$8.7
	Homeland Security	
NOS/PSN	Vessel Lease/Time Charter	\$9.9
NESDIS/ASTWF	NESDIS Single Point of Failure	2.8
NESDIS/ASTWF	Satellite Facilities Security	2.3
NWS/ASTWF	NWS Gateway Operations & Maintenance	3.0
NWS/ASTWF	NWS Climate Supercomputing Backup	7.2
NESDIS/ASTWF	Commercial Remote Sensing Licensing & Enforcement	1.2
	Subtotal, Homeland Security	\$26.4
OAR/ISI/DECCEN	Ocean Exploration	\$14.2
	Coastal Conservation	
NOS/SHC	CZM Grants	\$68.9
NOS/SHC	CZM Administration	6.6
NOS/SHC	NERRS ORF & Construction	26.4
NOS/SHC	Nonpoint Pollution Implementation Grants	10.0
NOS/SHC	Marine Protected Areas	3.0
NOS/SHC	National Marine Sanctuaries ORF & Construction	45.6
NOS/SHC	Coral Reef	16.0
NOS/SHC	South Florida	2.1
NOS/SHC	National Fish & Wildlife Foundation (NFWF)	1.0
NOS/SHC	Response and Restoration	3.7
NOS/SHC	Estuarine Restoration Program	1.2
	Subtotal, NOS	\$184.5

Other Key NOAA Programs

Line Office/ Strategic Plan	Itom	EV 2003 Total
NMFS/BSF	Pacific Salmon Recovery	\$17.4
NMFS/BSF	Conservation & Recovery w/ States	1.0
NMFS/BSF	Habitat Conservation	9.2
NMFS/RPS	Protected Species Mgmt. NFWF	1.0
NMFS/BSF	Coral Reef	11.0
NMFS/ SHC	Fisheries Habitat Restoration	13.2
	Subtotal, NMFS	\$52.8
OAR/SHC	Coral Reef Watch	\$0.5
NESDIS/SHC	Coral Reef Monitoring	\$0.7
NMFS/RPS	Pacific Salmon Recovery Fund & Treaty	\$110.0
	Subtotal, Coastal Conservation	\$348.5
	TOTAL - Other Key NOAA Programs	\$397.8

Energy Initiative \$8.7 Million Increase

Energy Initiative: NOAA requests a total of \$6.1 million to implement a pilot program that will provide more accurate temperature and precipitation forecasts, and additional river forecast products to help the energy industry improve electrical load forecasting and hydropower facility management. Based on industry estimates, this investment will result in savings of \$10 to \$30 million annually in the pilot region after the second year of the demonstration. Expanding the pilot nation-wide could generate savings of over \$1 billion per year.

Energy Permit Rapid Response: NOAA requests a total of \$2.0 million to support the establishment and implementation of a streamlined energy permit review process which will be executed under the auspices of the National Marine Fisheries Service. This proposal responds to an Executive Order directing Federal agencies to expedite permits and coordinate Federal, state, and local actions needed for energy-related project approvals on a national basis and in an environmentally sound manner. The goal of this request is to reduce, by 25%, the time required to adjust the permits of licensed energy projects/facilities. Currently, re-licensing of existing facilities takes 6-10 years. It is anticipated that the combination of regular re-licensing and permit adjustments to implement the new National Energy Policy will result in thousands of new actions for NOAA nationally.

Energy Management: NOAA requests a total of \$550,000 for Energy Management. The requested funds will be used to reduce NOAA's facility operating costs through actively pursuing energy commodities at competitive prices, identifying and implementing energy savings opportunities and applying renewable energy technologies and sustainable designs at NOAA-managed facilities. Many of the equipment retrofits that are a part of energy management have enabled facilities to recover their costs in less than five years.

Homeland Security \$26.4 million

On September 11, 2001, the Nation experienced an unprecedented attack on the World Trade Center and the Pentagon. NOAA immediately implemented its agency-wide Incident Response Plan, and was able to rapidly deploy critical assets, capabilities, and expertise to support response and recovery efforts. NOAA personnel in weather offices, satellite and remote sensing teams, hazardous materials units, marine transportation and geodesy offices, and fisheries enforcement teams provided a wide range of products and services.

NOAA's response to the September 11 attacks was rapid and focused. However, the attack fundamentally altered the context of the agency's incident response planning. The threats resulting from attacks on the nation may be different in nature, and larger in scale and scope. Thus, NOAA's Homeland Security efforts are focused on enhancing its response capabilities and improving internal safety and preparedness. NOAA is working quickly to improve its ability to coordinate emergency response, to evaluate its existing capabilities, and to identify products and services that will meet the challenge of new response realities.

NOAA's Homeland Security activities are dedicated to advancing the coordinated efforts within the Department of Commerce, the Office of Homeland Security and assist NOAA's many federal, state, and local partners.

In FY 2003, \$26.4 million is requested to address the most immediately recognized areas of programmatic vulnerabilities to ensure the continuity of the most critical of NOAA's services and information products in the event of natural or man-made emergencies.

Vessel Lease/Time Charter: NOAA requests a total of \$9.9 million for a Vessel

Lease/Time Charter. NOAA will initiate a vessel time charter to expand its hydrographic surveying capacity. While having the capability to operate throughout America's Exclusive Economic Zone (EEZ), initial emphasis during FY 2003 will be in the Gulf of Mexico. Ninety five percent of America's non-NAFTA economic trade moves through the marine transportation system. Any interruption in the flow of goods through our nation's marine transport system yields immediate and dire impact to the national economy. Four of the top seven port areas are found on the Gulf of Mexico, including: (1) New Orleans and South Louisiana, (2) Houston/Galveston, (3) Port Arthur, TX and Lake Charles, LA; and (4) Corpus Christi, TX. The combination of high traffic, hazardous cargos and vessels operating close to the ocean bottom make waterways and ports particularly vulnerable to terrorist activities including those utilizing low technology mines. Requested funding provides critical survey data to directly enhance safety of mariners, passengers and the national economy from threats both natural or human in origin.

The lease partner will supply operating personnel and a vessel with two launches equipped to perform multi-beam and side scan sonar surveys to NOAA standards. NOAA will provide the supervisory technical expertise. The vessel will be outfitted and conduct initial operations in FY 2003, with full operations planned for FY 2004. The estimate for the leased vessel at full performance in the Gulf is approximately 330 days at sea and 500 square nautical miles per year.

The combination of enhancements to NOAA in-house fleet capacity which will occur in FY 2002 and FY 2003, and the time charter vessel requested, will enable NOAA to complete essential baseline surveys to reduce national risk from terrorist mining and accelerate the schedule for completing the critical backlog from 20 to 10 years.

NESDIS Single Point of Failure: NOAA requests a total of \$2.8 million to provide

backup capability for all critical satellite products and services. This effort supports the continuity of critical operational satellite products and services during a catastrophic outage. In FY 2003, NOAA will begin the first phase of hardware, software, and telecommunications purchases; and perform initial testing of all capabilities for this backup system. The requested funding also supports installing additional communications links to connect the backup location to the NOAA Science Center in Camp Springs, Maryland.

Federal Building 4 in Suitland, Maryland is a critical single point of failure for every operational NOAA satellite product and service that the NWS and other users rely on for critical weather information. Critical polar-orbiting satellite products and services include POES products such as ozone, temperature and moisture sounder products; and non-NOAA satellite products from NASA, the DoD, Europe, and Japan. Federal Building 4 is also the single point of entry for all raw satellite data received at the NOAA Science Center, where NOAA generates critical geostationary products and services. These products include all GOES AWIPS remapped imagery, high density winds, precipitation estimates, sounder products, and non-NOAA satellite data from NASA, Europe, Japan, and India.

Satellite Facilities Security: NOAA requests a total of \$2.3 million to enhance security at the Fairbanks, Alaska and Wallops, Virginia satellite Command and Data Acquisition ground stations. NOAA requires these funds to enhance the systems that protect these stations, reducing the risk to satellite and ground systems assets due to breaches in security. These satellite stations represent the backbone of the ground systems that support NOAA spacecraft programs - commanding, controlling, and acquiring data from on orbit satellites with an estimated value of \$4.5 billion.

NOAA will use the requested funds to provide enhanced armed guard services at both stations. NOAA will also install new barriers to control access to the Wallops, Virginia and the Fairbanks, Alaska facilities. The additional funding will also support upgrading and expanding existing lighting along the access road and around buildings and antennas at the Wallops Virginia and the Fairbanks, Alaska facilities.
NWS Gateway Critical Infrastructure Protection: NOAA requests a total of \$3.0 million for the National Weather Service Telecommunications Gateway

Backup (NWSTG). During FY 03, this funding will enable the NWS to complete the establishment of the NWSTG facility at the Federal Emergency Management Agency's Mt. Weather Emergency Assistance Center in Berryville, VA. After scheduled deployment in early FY 04, the continued funding level of \$3.0M will cover recurring costs for NWSTG backup communications, system software licenses, systems operations and maintenance support, facility rent, and cyclical technology refreshment. This will ensure uninterrupted delivery of critical meteorological data necessary for the protection of life and property, and the economic well being of the Nation.

The current NWSTG facility, located within NWS Headquarters in Silver Spring, Maryland, has no operational backup. The NWSTG is a single point of failure, vulnerable to natural disasters, human error, computer viruses, hacker attacks, and terrorism. Today, if the NWSTG failed, more than 90 percent of the in situ weather observations necessary for production of numerical weather prediction models would be lost; no national radar or weather prediction models would be sent to external users; no weather observations and products would be sent to commercial users/vendors; access and exchange of weather observations and products with other Federal agencies and Nations would be severely limited; and all NWS centrally provided Internet-services would be halted.

Weather & Climate Supercomputing Backup: NOAA requests a total of \$7.2 million to implement an operational backup system for the NWS weather and climate

supercomputer. The NWS weather and climate supercomputer is a critical component of NOAA's mission and is currently a single point of failure as the entire system is located in a single facility. Many of the data, products and services provided by and through the Central Computer System (CCS) directly contribute to the issuance of life saving NWS watches and warnings to the public. The NWS weather and climate supercomputing backup system is a critical part of DOC's Homeland Security Initiative and NOAA's comprehensive business continuity plan, designed to support uninterrupted data and product delivery to NOAA customers. The National Center for Environmental Prediction's (NCEP) CCS is currently the only computer system within NOAA capable of running highly complicated forecasting models in the required operational (regimented) mode. During FY 2003 the NWS will acquire the necessary backup system hardware capability, conduct site selection, and begin installation.

Commercial Remote Sensing License: NOAA requests a total of \$1.2 million for the Commercial Remote Sensing Licensing and Enforcement Program to ensure the timely review and processing of satellite license applications. This NOAA investment will support staff engaged in the review of commercial remote sensing licensing applications. NOAA will also support monitoring and compliance activities, which include the review of licensee quarterly reports, on-site inspections, audits, and license violation enforcement. The funds requested in FY 2003 will also support activities regarding the implementation of shutter control over commercial systems to ensure that our Nation can respond to commercial remote sensing security issues in national security and foreign policy crisis situations.

Ocean Exploration

\$14.2 Million

NOAA requests a total of 14.2 million for Ocean Exploration. This program seeks to increase our national understanding of ocean systems and processes through partnerships in nine major voyages of discovery in FY 2003. The total request of \$14.2 million is \$0.2 million above the FY 2002 enacted level. Ocean Exploration is NOAA's multi-line office (OAR/NOS/NMFS) investment in undersea exploration, research, and technology in both the deep ocean and areas of special concern, such as the U.S. Exclusive Economic Zone (EEZ), and National Marine Sanctuaries (NMS). The Ocean Exploration program consists of four key objectives: 1) Mapping the physical, geological, biological, chemical and archaeological aspects of the oceans, 2) Exploring ocean dynamics and interactions at new scales to improve our understanding of the complex interactions in this vital component of the planet's life support system, 3) Developing new sensors and systems for ocean exploration to regain U.S. leadership in marine technology, 4) Reaching out in new ways to stakeholders to improve the literacy of learners of all ages with respect to ocean issues. It uses ten percent of all funds for education and outreach to teach America's school children and stimulate



their interest on ocean sciences. The data and knowledge will also be made available to all researchers and the general public quickly so they may be better informed on ocean issues. In FY 2001 we mapped over 3,200 square nautical miles using high-resolution tools, discovered 14,000 year old interidal mussel beds near Heceta Bank, collected unique samples for research, many of which were new discoveries, assisted Navy in the recovery of the steam engine from the USS Monitor, mapped more than a dozen shipwrecks in the Thunder Bay National Marine Sanctuary and had an average of 1,400 hits per day on our website www.oceanexplorer.noaa.gov, which contains 1,600 pages of detailed information about our FY 2001

discoveries, teachings, and lesson plans, photo gallery, and mission legs.

<u>New Ocean Resources</u>: A wealth of living and non-living resources will be discovered that may provide medical science new opportunities for pharmaceutical applications. The oceans hold vast untapped economic potential beyond fishing. Ocean floor energy resource deposits, such as methane hydrates, may revolutionize patterns of current fossil fuel consumption. Microbial organisms that thrive in deep-sea vents have already been found to have significant biotechnical potential.

Exploring Ocean Acoustics: This program will (1) create a network for monitoring marine sound of natural and human origin in the Pacific and North Atlantic Oceans and (2) determine the effects of this noise on marine mammals and turtles. Listening to underwater sound can reveal objects thousands of miles away and until recently, this sound has only been monitored by the military. By monitoring sound scientists will be able to locate earthquakes, track whale migrations, and assess the impact of noise on marine mammals.

<u>America's Maritime Heritage:</u> The program will survey, locate, inventory, and explore historic shipwrecks and archeological sites principally within U.S. jurisdiction and sanctuaries. Experts estimate that 50,000 shipwrecks are in U.S. waters. Recent successful expeditions to locate and explore the CSS *Hunley*, the U.S.S. *Monitor*, and shipwrecks in the Thunder Bay National Marine Sanctuary in Lake Huron, have demonstrated both public interest and the continuing development of remarkable deep sea technology.

Exploring Ocean Frontiers: NOAA will employ a full array of modern ocean technology to survey, characterize, and define diverse marine environments in areas that are not well known or understood. Work will focus on water masses and ocean fronts, benthic life, submarine trenches and canyons, submarine volcanoes, polar seas, sea-mounts, hydrocarbon seeps and hydrate beds, and living and working in the sea.

Coastal Conservation \$348.5 Million

NOS \$184.5 Million

Coastal Zone Management: NOAA requests a total of \$75.6 million for Coastal Zone Management Activities. The purpose of the national Coastal Zone Management (CZM) Program is to maintain and improve the quality and utility of the Nation's coastal lands and waters through a national network of Federally-approved, coordinated, and supported state management programs that seek to maintain the balance between the needs of resource protection and coastal-dependent economic activity. These programs are state developed and implemented. The plans recognize the significance of coastal resources to our Nation's population and economy and promote improved management of these important assets. Federal matching funds are provided as cooperative agreements to support state staff and community projects that address the broad spectrum of coastal management issues ranging from habitat conservation and protection of life and property from coastal hazards, to urban waterfront and port revitalization (Section 306/306A CZMA). The \$75.6 M includes grants and administration.

National Estuarine Research Reserve System (NERRS): NOAA requests a total of \$26.4 million for NERRS, of which \$16.4 million is in ORF and \$10.0 million is in PAC Construction. The National Estuarine Research Reserve System (Section 315 CZMA) is a national network of estuarine protected areas representing the diverse biological and physical characteristics of estuarine systems of the United States. Reserves are owned and operated by state governments and serve as local, regional, and national sources of technical information and testing grounds for the improvement of coastal resource management. By the end of FY 2003, it is expected that there will be 26 designated reserves in 21 states and territories covering over one million acres of estuarine lands and waters, with one more site in the designation process. Of the \$26.4 million total, \$10.0 million is requested for NERRS Construction. Supplementing or updating facilities at the 26 reserves will be carried out in conjunction with the development of system-wide construction plans. All construction activities are carried out based on the current needs for implementing core NERRS program and external opportunities for partnerships. The facilities and land of the reserves are owned and managed by the states in this Federal-state partnership. **Nonpoint Pollution Implementation Grants:** NOAA requests a total of \$10.0 million for Nonpoint Pollution Implementation Grants. This investment will provide states with resources to reduce nonpoint pollution, the greatest single threat to coastal water quality. Coastal waters are increasingly impacted by polluted runoff. Symptoms include the impacts of Pfiesteria in coastal waters of the eastern seaboard, nutrient over-enrichment in the Gulf of Mexico, the loss of salmon fisheries in the Pacific Northwest and local closures of shellfish beds and beaches throughout the country. NOAA will provide grants to states with approved plans to address the causes of these and other symptoms of the degradation of our coastal water quality.

Marine Protected Areas (MPA): NOAA requests a total of \$3.0 million for the Marine Protected Areas Program. NOAA's Marine Protected Areas Program, in coordination with the Department of the Interior, coordinates and shares information, tools and strategies, and provides guidance to enable and encourage Federal, state, territorial, tribal and local agencies in the exercise of their respective authorities to enhance the protection of marine protected areas.

National Marine Sanctuary Program: NOAA requests a total of \$45.6 million for the National Marine Sanctuary Program, of which \$35.6 million is in ORF and \$10.0 million is in PAC Construction. This continued investment will allow for upgrading support to the operating and technical capacity in the thirteen national marine sanctuaries. Congress has required NOAA to invest in providing adequate resources for the management and protection of existing sanctuaries prior to designating new sanctuary sites. The Congress has called for sufficient resources for operational staff, facilities and equipment, effective implementation of management plans, enforcement, and particularly for site characterization including cultural resources and inventory of existing natural resources. The FY 2003 increase will support implementation of management changes identified through the revisions of sanctuary management plans. These efforts will improve protection of important sanctuary resources, including coral reefs, endangered marine mammals, sensitive habitats, and significant cultural resources. Of this amount, \$10.0 million will be used for construction. The National Marine Sanctuary Program will be implementing a comprehensive facilities plan that prioritizes needs and opportunities at individual sites for constructing sanctuary visitor centers, collaborative education projects, and operational needs. In order to help establish an appreciation of sanctuary resources by the public, the program will begin to construct a network of regional visitor centers.

Coral Reef Program: NOAA requests \$16.0 million for its Coral Reef program within

NOS. The NOAA Coral Reef Program implements priority actions identified by the U.S. Coral Reef Task Force's National Action Plan to Conserve Coral Reefs. NOS is undertaking a series of activities to reduce human impacts on coral reefs and restore reef environments. NOS works closely with its many NOAA and external partners to ensure that resources and capabilities are utilized to improve coral reef management and protection, including mapping, monitoring, education and designation of marine protected areas.

South Florida: NOAA requests an increase of \$2.1 million for South Florida. The South Florida Initiative is an integrated effort among federal, tribal, state and non-governmental partners to halt the degradation and restore the function of the South Florida ecosystem. NOAA supports the South Florida Initiative devoted to integrated Ecosystem Health Monitoring for the restoration and protection of coastal and marine areas of the South Florida Ecosystem.

Funding will support scientific investigations in the South Florida coastal ecosystem to better understand and restore the coastal areas as part of the overall restoration effort. When coupled with monitoring efforts, these investigations show the interactions between restoration efforts and oceanographic, atmospheric, geologic, hydrologic, and fisheries processes. Much of this work is coordinated through researchers at NOAA's Atlantic Oceanographic and Meteorological Laboratory (AOML) and a variety of university partners.

The Initiative has already produced significant accomplishments in this area. Continued investment is necessary to restore and maintain the marine ecosystem and the associated economies of South Florida.

National Fish and Wildlife Foundation (NFWF): NOAA requests a total of \$1.0 million for NOS support of the National Fish and Wildlife Foundation (NFWF), a nonprofit organization dedicated to the conservation and management of fish, wildlife, and plant resources, and their habitats. These funds will be distributed through the NOAA grants process.

Response and Restoration: NOAA requests a total of \$17.2M for Response and

Restoration, including a \$2.0 million program increase. Of the total amount, \$3.7 million is considered part of NOAA's FY 2003 Coastal Conservation crosscutting initiative. Through the Office of Response and Restoration (OR&R), NOAA fulfills the natural resource stewardship mandate of the Secretary of Commerce to protect and restore coastal resources by countering and responding to environmental threats and promoting sound coastal decisions. Environmental threats addressed by OR&R include oil and hazardous material spills, hazardous waste sites, and contaminated sediments. NOAA also addresses activities that affect coastal environmental quality such as vessel groundings, coastal storms that mobilize contaminants, and port infrastructure development and maintenance to promote safe navigation.

Estuarine Restoration Program: NOAA requests \$1.2 million for the Estuarine

Restoration Program. NOS supports NOAA-wide activities mandated by the Estuary Restoration Act of 2000. NOAA works with other partners to implement a national estuary habitat restoration strategy designed to ensure a comprehensive approach towards habitat restoration projects. NOAA's activities include the development of scientifically sound monitoring protocols and standards for coastal habitat restoration projects. In addition, NOAA is developing restoration databases that provide quick and easy access to accurate and up-to-date information regarding all projects funded under the Estuary Restoration Act of 2000, as well as information on projects throughout the country that meet the standards established as a part of the Act for monitoring and data collection to provide scientists and resource mangers with information critical to successful estuary habitat restoration efforts.

NMFS \$52.8 Million

Pacific Salmon Recovery: NOAA requests a total of \$17.4 million for this program within the Protected Resources Research and Management, Science and Technology line item. This investment will provide for NMFS continued investment for the recovery of these species because the threats of extinction come from a variety of activities including fishing, hatchery operations, grazing, irrigation, and timber harvest.

Cooperative Conservation and Recovery with States: NOAA requests a total of **\$1.0 million to provide funds to state partners under the Endangered Species Act Section 6 cooperative conservation program.** These agreements will provide the means for states and local communities to undertake local initiatives in the management and recovery of ESA-listed and candidate species by providing the legal authority to make the decisions about how best to protect species at risk of extinction. The agreements would provide funding on a matching basis to accomplish conservation activities. Funding provided to the states would support local researchers, non-governmental organizations and volunteers to accomplish monitoring, restoration, science and conservation activities.

Habitat Conservation: NOAA requests a total of \$9.2 million to continue NMFS efforts to provide a comprehensive program for conservation of the habitat of the Nation's living marine resources through habitat restoration in order to support the National Oceanic and Atmospheric Administration (NOAA) Strategic Plan Goal to sustain healthy coasts.

Protected Species Management - NFWF: NOAA requests a total of \$1.0 million for NMFS support of the National Fish and Wildlife Foundation. These funds will continue NMFS partnership with NFWF to issue challenge grants with a matching requirement for habitat mapping and conservation programs.

Coral Reefs: NOAA requests a total of \$11.0 million which will allow NMFS to continue implementing priorities of the U.S. Coral Reef Task force. Funding will support research, monitoring, and local level projects to reduce human impacts on coral reefs.

Fisheries Habitat Restoration programs: NOAA requests a total of \$13.2 million for habitat restoration programs. These funds will continue to support NOAA Restoration Center activities and the community-based restoration programs which provides seed money and links NOAA technical expertise to grass-roots restoration projects, and emphasizes collaborative strategies built around improving NOAA trust resources. This highly successful national effort encourages partnerships with groups outside of NOAA and regularly has leveraged appropriated funds by factors of five to six, and by as much as 10 to 1.

OAR

\$0.5 Million

Coral Reef Watch: NOAA requests a total of \$0.5 million to improve understanding of coral reef ecosystems through environmental monitoring, and predicting future change.

Long-term in situ coral reef monitoring stations will provide information essential for sound management decisions, long-term planning, and important research. The data collected will allow for improved understanding of coral reef ecosystem response to changes in the physical environment, and prediction of coral bleaching.

NESDIS \$0.7 Million

Coral Reef Monitoring: NOAA requests a total of \$0.7 million to develop a Coral Reef

Watch Program. The program focus is to (1) transition existing experimental satellite reef health monitoring capabilities into a viable operational capability, to (2) formalize the existing U.S. leadership in the emerging global "Virtual Coral Reef Ecosystem Monitoring Laboratory," and, (3) provide for a solid scientific basis for future monitoring and assessment products/capabilities. This initiative is consistent with the objectives envisioned for an Integrated Ocean Observing System, applied to the coral reef oceans areas. NOAa has established itself as a world leader in coral reef health monitoring using satellite reconnaissance techniques. Coral Reef Watch strengthens NOAA's position as the world leader in operational environmental monitoring and early warnings. It also presents a visible commitment to the frequently neglected U.S. tropical territories who, by their distance from the U.S., frequently are considered under-represented in NOAA's activities. This is a joint NOAA effort spearheaded by NESDIS in partnership with OAR, NOS, and NMFS.

Pacific Salmon Recovery Fund and Treaty \$110.0 Million

Pacific Salmon Recovery Fund: NOAA requests a total of \$110.0 million for the Pacific Salmon Recovery Fund. Funding at this level will allow the states and tribes to continue support for habitat restoration and protection, research and enhancement, monitoring and evaluation, and salmon recovery planning and implementation efforts. FY 2003 funding for the Pacific Salmon Treaty at \$20.0 million, along with a smaller amount in the State Department, will also capitalize the Northern and Southern transboundary funds at \$75.0 million and \$65.0 million respectively. A more detailed funding breakout for the Pacific Salmon Recovery Fund can be found in Section 4, supplemental information.

Financial Management in NOAA

In FY 2003, NOAA will continue to improve its core financial management responsibilities in order to meet the future needs of NOAA and its stakeholders. From a management standpoint, the ability of an organization to execute its appropriations properly, is equally as important, if not more so, than any single budgetary request for new resources. Without true integrity of its financial management systems and processes, requests for new resources are subject to mismanagement and risk not accomplishing their intended purpose. As such, NOAA has placed a high priority on the proper execution and accounting of its resources, as requested in the President's Budget and appropriated by Congress. Key budgetary and financial management improvements are centered around three key areas: 1) Improved Funds Control and Execution through Automation; 2) Improved Budget Structure; and 3) Improved Outreach and Communications.



Improved Funds Control and Execution through Automation

Included in the FY 2003 request is \$16.1 million for the Commerce Administrative Management System (CAMS). CAMS will contribute to improved financial management in a number of significant ways, primarily by accounting for NOAA's expenditures and maintaining NOAA's clean audit opinion. While NOAA has made significant efforts to retain its clean audit opinion for a third consecutive year, it has done so with inefficient manual, error-prone business processes that are laborintensive. Without significant amounts of overtime and creative manual resource tracking, NOAA's accounting details would be non-existent. CAMS will provide financial managers with on-line, real-time, and accurate financial information and will enable NOAA and DOC to meet statutory obligations under the Federal Managers' Financial Integrity Act (FMFIA) and the Chief Financial Officers Act (CFO Act).

Similarly on the budgetary side, the ability to distribute the agency's funds in a timely and accurate manner is equally important. These processes were also paper driven manual efforts, that took inordinate amounts of time and, in the end, hampered program managers' ability to conduct their programs. In response, the NOAA Budget Execution staff developed an in-house automated allowance process that not only enables managers to receive their funding earlier in the process but also enhanced NOAA's ability to track its distributions throughout the year. In past years, the allocation process took up to 6 months to complete. Today, allocations are made within 15 days of the enacted appropriation and completed in half the time previously recorded.

Improved Budget Structure

In the FY 2003 budget, legislation is requested to establish a Business Management Fund (BMF) for corporate centralized services in NOAA. For decades, NOAA has managed its centralized services through a funding mechanism supported in its current financial management system, FIMA, known as indirect costs. The process by which funds were collected and distributed to support centralized services was convoluted at best, and fraught with inconsistencies. Three years ago, NOAA began a comprehensive effort to review its corporate funding methodologies and work toward moving its headquarters management fund into a business-like environment. A number of improvements have been

realized already, including stability in corporate charges for three years in a row, returning unspent corporate costs, and reporting to customers the status of funds mid-year and at year-end. However, to complete this effort of truly realizing a business fund operation, NOAA requires legislation. No current legislation exists for NOAA to operate this fund, particularly after FIMA is replaced by CAMS. Once legislation is secured, NOAA will begin to develop budgetary documentation with the same rigor and reporting as required with appropriated funds. Already underway, in support of this effort is NOAA's initiative to implement Activity Based Costing (ABC) across all of the Office of Finance and Administration's key business lines. ABC studies are being completed to compute costs for services such as human resources, grants, and eventually all support services provided. The end result of these studies will be the ability to charge customers a fee for services, based on actual and estimated usage, and by the specific services required. This will replace the flat rate, off-the-top methodology employed today and will allow charges to be tailored to line offices' specific requirements. NOAA is committed to bringing its corporate services up to 21st century standards, and the flexibility of a business management fund is a cornerstone of its plan.

NOAA Budget Structure - Over the past several years, NOAA has been working to respond to Congressional concerns regarding its budget structure. NOAA, in conjunction with both Congressional and Administration assistance, recently restructured the budget during the FY 02 Appropriations process.

However, this effort is just a beginning, and NOAA will continue to work with Congress to ensure that our budget is adapted to Congressional reporting needs and concerns. For example, in the FY 2003 budget, NOAA has added additional specialty tables that will allow Congress to track budgetary initiative that cross multiple programs and/or NOAA Line Offices, and NOAA has enhanced its base narratives to be more descriptive. Also, in support of flexible budgetary reporting, NOAA is developing a budget database that moves its tracking tables from the current lotus driven environment to a database environment. This will allow for more accurate tracking, quicker response to inquires, and allow for greater flexibility in preparing budgetary charts in response to Congressional and Administrative inquires. In conjunction with OMB, NOAA has developed a simplified tracking table that clearly indicates NOAA's primary mission areas.

Finally, NOAA also began an effort to conduct a position and FTE management review. This effort began in FY 2002 and was adopted during the FY 2002 appropriations process.

The FY 2002 efforts focused developing an accurate baseline of FTEs based on actual usage. The baseline was completed and has been implemented. In FY 2003, NOAA's efforts will focus on ensuring that the positions associated with this new baseline are aligned properly with program requirements and facilitate further analysis of NOAA's FTE usage and requirements.

Improved Outreach and Communications

In 2001, the NOAA Budget Office realigned its current staff in order to more expertly focus on budgetary outreach and communications, in particular, to improve communication and responsiveness to the Appropriations Committees by coordinating, facilitating, reviewing and tracking NOAA's responses to requests for budgetary information. NOAA developed and implemented an in-house policy for its responses that facilitated the completion of nearly 800 individual requests since April of last year. With regard to cycle time, NOAA has reduced its response time from as much as 45 business days to an average of less than 6 business days, with a large majority responded to in the same day requested. In addition, over the last year, the NOAA Budget Office has fully developed a NOAA Budget Office Website that has both secure components for internal users and an external website for stakeholders to access real-time budgetary information.



Conclusion

As evidenced by NOAA's improving financial and budgetary management, NOAA is doing its part to exercise fiscal responsibility as stewards of the Nation's trust as well as America's coastal and ocean resources. And, in the same way that NOAA is responsible for assessing the Nation's climate, we are responsible for assessing our management capabilities. It is within this broader management context that NOAA continues looking for opportunities to improve. As in past years, NOAA's FY 2003 Budget Request includes measures which track results to the level of public investment. NOAA will continue to leverage its programs and investments by developing those associations that most efficiently and economically leverage resources and talent, and that most effectively provide the means for successfully meeting mission requirements. NOAA will continue to respond to key customers and stakeholders in its financial management area. We are continuously improving our business processes and believe that these efforts are the underpinning of NOAA's requests for new budgetary resources. Any questions or concerns in these areas can be directed to Jolene Ann Lauria Sullens, Deputy Chief Financial Officer, NOAA at http://www.rdc.noaa.gov/~nbo/



Total Request: \$410,927,000

ORF: \$385,347,000 PAC: \$20,012,000 Environmental Improvement and Restoration Fund (EIRF): \$5,568,000

The National Ocean Service (NOS) is the primary Federal agency working to preserve America's coastal Resources through the observation, measurement, assessment, and management of the Nation's coastal and ocean areas, as well as conducting response and restoration activities. More than 139 million people – over 50 percent of the national total – currently reside along the narrow coastal fringes. The population in these coastal areas is expected to increase to about 165 million by the year 2015. This population growth and development places many of the Nation's coastal areas under increasing pressure. Growth in coastal areas creates jobs, generates economic prosperity, adds new industries, enhances educational opportunities, and increases tax revenues. However, it also burdens local environments, threatening the very resources that draw people to the coast.

As a national leader for coastal stewardship, NOS promotes a wide range of research activities to create the strong science foundation required to advance the sustainable use of our precious coastal systems. NOS contributes significantly to achieving four of NOAA's seven Strategic Plan Goals: Sustain Healthy Coasts, Promote Safe Navigation, Build Sustainable Fisheries, and Recover Protected Species. NOS provides improvements in the quality, quantity, geographic distribution, and timeliness of ocean and coastal observations. Mapping, charting, geodetic, and oceanographic activities produce marine and coastal data to increase the efficiency and safety of marine commerce and support coastal resource management. NOS protects and restores coastal resources injured by releases of oil and other hazardous materials. NOS also manages marine sanctuaries and, in partnership with the coastal states, helps manage the Nation's valuable coastal zones and nationally significant estuarine reserves. Understanding of the coastal environment is enhanced through coastal ocean activities which support science and resource management programs.

Significant Adjustments-to-Base (ATBs)

\$12.4 million

NOAA requests an increase of \$5.6 million to fund adjustments to base and 5 FTE for National Ocean Service activities. The increase will fund the estimated FY 2003 Federal pay raise of 2.6 percent and annualize the FY 2002 pay raise of 4.6 percent. The increase will also provide mandatory inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration (GSA). Also included in this amount is \$6.8 million which supports the Administration's proposal to fund all of the Civil Service Retirement System (CSRS) payments out of agency budgets.

Terminations: -\$131.1 million

The FY 2003 request proposes to terminate \$131.1 million for projects funded in the FY 2002 appropriation. For additional details on program terminations see *Section 4: Table of Terminations*

Detailed Program Increases by Sub-Activity

Operations, Research and Facilities (ORF)

Navigation Services

\$122.2 million

The total request of \$122.2 million for Navigation Services represents a net increase of \$2.0 million above the FY 2002 Enacted level. The FY 2003 President's Budget funds a suite of navigation products and services that help ensure the safety of marine transportation, while improving the economic efficiency and competitiveness of U.S. commerce. This suite includes traditional products and services, such as paper charts and tide predictions, as well as new products including electronic navigational charts and real-time oceanographic systems. This subactivity also supports the National Spatial Reference System (NSRS), a highly accurate and accessible geographic positioning framework which underpins a wide array of defense, transportation, public works, earth science, mapping and charting, and other activities critical to the Nation's economic infrastructure. Included in this subactivity is funding (at FY 2002 levels) for the NOAA/University of New Hampshire Joint Center for Hydrographic Excellence (\$2.6 million), and Height Modernization implementation activities in conjunction with the states of California and North Carolina (\$1.0 million per state).

The Navigation Services base had a net decrease of \$8.0 million due to program terminations, activities rolled into base programs, and receipt of the CSRS proposed funds and ATBs to cover non-avoidable increases for employee pay, rent and other charges. Appropriations for the following activities will be rolled into the Mapping and Charting base: Coastal Storms (\$1.0 million), Electronic Navigational Charts (\$3.4 million), and Shoreline Mapping (\$1.0 million). The FY 2002 increase of \$0.3 million for the National Spatial Reference System will be rolled into the Geodesy base. Of the FY 2002 enacted funding for PORTS, \$3.0 million will be rolled into the Tide and Current Data base program (\$1.0 million will be terminated). Coastal Storms (\$1.0 million) will also be rolled into the Tide and Current Data base

program.

Mapping and Charting: \$78.5 million

The total request of \$78.5 million for Mapping and Charting represents a net increase of \$3.7 million above the FY 2002 Enacted level.

Vessel Lease/ Time Charter: \$9.9 million

NOAA requests an increase of \$9.9 million and 6 FTE for a Vessel Lease/Time Charter. NOAA will initiate a vessel time charter to expand its hydrographic surveying capacity. While having the capability to operate throughout America's Exclusive Economic Zone (EEZ), initial emphasis during FY 2003 will be in the Gulf of Mexico. Ninety five percent of America's non-NAFTA economic trade moves through the marine transportation system. Any interruption in the flow of goods through our nation's marine transportation system yields immediate and dire impact to the national economy. Four of the top seven port areas are found on the Gulf of Mexico, including: (1) New Orleans and South Louisiana, (2) Houston/Galveston, (3) Port Arthur, TX and Lake Charles, LA; and (4) Corpus Christi, TX. The combination of high traffic, hazardous cargo and vessels operating close to the ocean bottom make waterways and ports particularly vulnerable to terrorist activities including those utilizing low technology minag. Beguarded funding provides critical survey date to directly enhance softy of

technology mines. Requested funding provides critical survey data to directly enhance safety of mariners, passengers and the national economy from threats both natural or human in origin.

The lease partner will supply operating personnel and a vessel with two launches equipped to perform multi-beam and side scan sonar surveys to NOAA standards. NOAA will provide the supervisory technical expertise. The vessel will be outfitted and conduct initial operations in FY 2003, with full operations planned for FY 2004. The estimate for the leased vessel at full performance in the Gulf is approximately 330 days at sea and 500 square nautical miles per year.

The combination of enhancements to NOAA in-house fleet capacity in FY 2002 and the time charter vessel requested will enable NOAA to complete essential baseline surveys to reduce national risk from terrorist mining and accelerate the schedule for completing the critical backlog from 20 to 10 years.

Geodesy: \$25.4 million

The total request of \$25.4 million for Geodesy represents a net increase of \$0.3 million above the FY 2002 Enacted level.

Geodesy Base: \$22.7 million

The total request of \$22.7 million for Geodesy base funding represents an increase of \$2.1 million above the FY 2002 enacted level. Included in this request is a \$0.2 million program increase over FY 2003 base funding of \$22.5 million to support activities required to increase the Nation's access to the National Spatial Reference System (NSRS). This will be done by expanding the coverage of the National Continuously Operating Reference Stations network; improving the vertical accuracy of the Federal Base and Cooperative Base Network stations; and further improving the geoid model. The marine

transportation community and many other economic activities will derive significant safety and economic benefits from improved access to NSRS information. NOAA will focus its efforts in outreach and education to include user forums to assess constituent needs and provide workshops and technology transfer to further these objectives.

NOAA will also continue activities begun in FY 2002 to advance the National Geospatial Data One-Stop E-Gov initiative. This effort aims to enhance the ease of acquisition, use, and dissemination of geospatial data.

Ocean Resources Conservation and Assessment \$122.6 million

NOAA requests a total of \$122.6 million for this subactivity in FY 2003, representing a net decrease of \$32.2 million from the FY 2002 Enacted level. This investment will support ocean and coastal monitoring and assessment, responses to oil and hazardous materials spills, and directed research programs to provide comprehensive scientific information for decisions about the protection and sustainable use of coastal and ocean resources. These activities also help minimize damages to natural resources in the Nation's coastal areas, estuaries, and oceans, including the Great Lakes.

The Ocean Resources Conservation and Assessment (ORCA) had a net decrease of \$32.2 million from the FY 2002 enacted level due to program terminations, activities rolled into base programs, and other charges.

Funding of \$32.0 million for the following items are rolled into the Ocean Assessment Program base: Coastal Storms (\$0.8 million), Beaufort/Oxford (\$3.5 million), Pfiesteria and HAB Rapid Response (\$3.9 million), Coastal Service Center (\$18.0 million), Pacific Coastal Services Center (\$0.9 million), and Harmful Algal Blooms (\$5.0 million).

Of the FY 2002 appropriated funds, \$11.9 million are rolled into Response and Restoration base programs.

FY 2002 appropriated funds of \$3.8 million for Fish Forensics/Enforcement (\$1.3 million), MERHL (\$1.5 million), and Pfiesteria/Toxins Research (\$1.0 million) are rolled into the Ocean and Coastal Research base for FY 2003. FY 2002 appropriated funds of \$6.5 million for ECOHAB (\$4.2 million), Hypoxia (\$1.1 million), and South Florida Ecosystems (\$1.2 million) are rolled into the Coastal Ocean Science base for FY 2003.

Ocean Assessment Program: \$75.0 million

The total request of \$75.0 million for the Ocean Assessment Program represents a net decrease of \$19.8 million below the FY 2002 Enacted level.

Ocean Assessment Program Base: \$48.8 million

The total request of \$48.8 million for Ocean Assessment Program base funding represents an increase of \$35.0 million above the FY 2002 enacted level. This request includes \$32.0 million rolled into base funds and a \$0.3 million program increase to continue efforts to reduce the loss of life and property from Coastal Storms in the pilot region of the St. John's river watershed in northeastern Florida. NOAA's Coastal Storms proposal seeks to apply a cross-section of NOAA capabilities to: ensure the safety of the coastal population; support and enhance the coastal economy; and sustain the environmental health of coastal communities and resources. This request builds on the FY 2002 appropriation that began the pilot effort in northeastern Florida. A small amount of new funding will support planning for the initial stages of a new pilot in the Pacific Northwest for future years, a very different geographical and climatological region. Recent estimates for disaster losses are between \$10 and \$50 billion per year, with an average cost of \$50 million per event, 71 percent of which occur in coastal states or territories. Much of this damage occurs in inland areas adjacent to the coast and there are impacts throughout coastal watersheds.

Response and Restoration: \$18.4 million

The total request of \$18.4 million for Response and Restoration represents a net decrease of \$10.0 million below the FY 2002 Enacted level.

Response and Restoration Base: \$17.2 million

NOAA requests an increase of \$2.0 million over FY 2002 Enacted level for Response and Restoration base funding for a total of \$17.2 million to promote restoration of coastal areas through enhanced partnerships and regional based efforts. NOAA will leverage and strengthen restoration efforts through: implementing regional planning; building partnerships; evaluating and improving habitat restoration techniques; and expanding monitoring programs. By expanding coastal habitat restoration, the quality of life, environment and economy will be improved

NOAA will support regional restoration planning efforts for selected areas by building partnerships and consensus among industries and Federal, state, and local agencies on restoration priorities. These partnerships will leverage efforts to ensure maximum benefit and expedite implementation of ongoing restoration projects. NOAA will also continue monitoring and evaluating restoration efforts.

Ocean and Coastal Management

\$140.5 million

The total request of \$140.5 million for Ocean and Coastal Management represents a net increase of \$1.6 million above the FY 2002 Enacted level. This investment supports the coastal states and territories in implementing Federal partnership programs that promote sustainable use of the Nation's coastal zone, and designating and managing unique and nationally significant marine and estuarine areas.

The Ocean and Coastal Management program had a net increase of \$0.09 million from the FY 2002 enacted level due to program terminations, activities rolled into base programs, and receipt of the CSRS proposed funds and ATBs to cover non-avoidable increases for employee pay, rent and other charges.

Ocean Management: \$35.6 million

The total request of \$35.6 million for Ocean Management represents a net increase of \$1.4 million above FY 2002 Enacted levels.

Marine Sanctuary Program: \$35.6 million

NOAA requests an increase of \$0.7 million over the FY 2002 Enacted level for the National Marine Sanctuary Program for a total of \$35.6 million. This continued investment will allow for support upgrades to the operating and technical capacity in the thirteen national marine sanctuaries. Congress has required NOAA to invest in providing adequate resources for the management and protection of existing sanctuaries prior to designating new sanctuary sites. The Congress has called for sufficient resources for operational staff, facilities and equipment, effective implementation of management plans, enforcement, and particularly for site characterization including cultural resources and inventory of existing natural resources. The FY 2003 increase will support implementation of management changes identified through the revisions of sanctuary management plans. These efforts will improve protection of important sanctuary resources, including coral reefs, endangered marine mammals, sensitive habitats, and significant cultural resources.

Procurement, Acquisition and Construction (PAC)

National Ocean Service

\$20.0 million

NOAA requests a total of \$20.0 million in the PAC account for NOS, a net decrease of \$67.8 million from FY 2002 Enacted levels.

National Estuarine Research Reserve (NERRS): \$10.0 million

The total request of \$10.0 million for the NERRS represents a net decrease of \$17.9 million below FY 2002 Enacted levels. This amount includes a \$1.6 million increase above the FY 2002 funding level for NERRS construction and land acquisition and will provide the level of funding needed to support this Federal-state partnership designed to protect and understand valuable estuarine resources through research and education. Key estuarine habitats (i.e., wetlands and other habitat slated for development, threatened and endangered species habitat, areas for habitat restoration, etc.) will be protected through state land acquisition and construction of facilities for existing and new reserves. Improved or expanded NERRS facilities will provide needed visitor, research and education centers and interpretive exhibits for visitor access and resource protection.

National Marine Sanctuary Construction: \$10.0 million

The total request of \$10.0 million for National Marine Sanctuary Construction represents a net decrease of \$4.8 million below FY 2002 Enacted levels. The Sanctuary program will continue efforts on some of the projects begun in FY 2002, and address operational facility requirements and small outreach efforts, such as exhibits. The NMS program will be implementing a comprehensive facilities plan that prioritizes needs and opportunities at individual sites for constructing sanctuary visitor centers,

collaborative education projects and operational needs. These facilities serve as important windows into the resources of the sanctuaries, since most of these special marine environments are offshore and are not easily accessible by many visitors. Whenever possible, sanctuaries utilize existing aquaria, museums, and other appropriate facilities to develop cooperative centers where the public and environmental decision makers can gain direct, objective and focused information on major conservation issues.

Other Accounts

Coastal Zone Management Fund (CZMF) [Offset to ORF]

The Coastal Zone Management Fund was established by the Coastal Zone Reauthorization Amendments of 1990. The fund consists of loan repayments from the former Coastal Energy Impact Program. The proceeds are to be used to offset the ORF account for the costs implementing the Coastal Zone Management Act of 1972, as amended. This amount will be \$3.0 million in FY 2003. As a part of the appropriations process, NOAA proposed and Congress agreed in FY 2002, to use the Fund as a general offset to the costs of implementing the CZMA by transferring any amounts collected under the Fund to the ORF account.

Environmental Improvement and Restoration Fund (EIRF): \$5.6 million

NOAA requests a total of \$5.6 million of a total NOAA request of \$11.1 million for the Environmental Improvement and Restoration Fund (EIRF).

NOS requests \$5.6 million, a decrease of \$4.8 million under the FY 2002 enacted level, out of a total NOAA request of \$11.1 million for the Environmental Improvement and Restoration Fund (EIRF). The other half of the EIRF is described under the National Marine Fisheries Service. The EIRF was created by the Department of Interior and the Related Agencies Act of 1998 for the purpose of carrying out marine research activities in the North Pacific. The EIRF provides funds for the purpose of carrying out marine research activities in the North Pacific. These funds will provide grants to Federal, State, private or foreign organizations or individuals to conduct research activities on or relating to the fisheries or marine ecosystems in the North Pacific Ocean, Bering Sea, and Arctic Ocean.



National Marine Fisheries Service

Total Request: \$741,236,000

ORF: \$603,455,000 PAC: \$17,000,000 Fishermen's Contingency Fund: \$954,000 Foreign Fishing Observer Fund: \$191,000 Fisheries Finance Program: \$-57,000 Promote & Develop: \$4,127,000 Pacific Coastal Salmon Recovery Fund: \$90,000,000 Pacific Salmon Treaty: \$20,000,000 Environmental Improvement & Restoration Fund: \$5,566,000

The National Marine Fisheries Service (NMFS) is responsible for the management and conservation of living marine resources within the United States' Exclusive Economic Zone. NMFS also provides critical support, scientific and policy leadership in the international arena, and plays a key role in the management of living marine resources in coastal areas under state jurisdiction. NMFS implements international agreements on conservation and management measures through science-based conservation and management actions that are aimed at sustaining long-term use and promoting the health of coastal and marine ecosystems. As a result, benefits to the Nation from the use of living marine resources are maximized. Programmatic authority for fisheries management, species protection, and habitat conservation activities are derived primarily from the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), the Sustainable Fisheries Act (SFA), the Marine Mammal Protection Act (MMPA), and the Endangered Species Act (ESA). Other acts provide additional authority for enforcement, seafood safety, habitat restoration, and cooperative efforts with states, interstate fish commissions, and other countries. These activities rely on a strong scientific and research competency to support the challenging public policy decision process associated with this stewardship responsibility.

Fisheries Modernization. NMFS continues to maximize the commercial, recreational, intrinsic and

ecological value of living marine resources for the Nation in the 21st century. In order to meet this challenge, NMFS has taken a fresh approach to its stewardship role and has made basic changes in the way it conducts its business that include efficient, flexible, scientifically-based policy and regulatory processes. Yet, much still needs to be done. Based on a series of internal and external assessments of the Agency, the FY 2003 Fisheries Modernization initiative proposes additional resources to fulfill a multi-year commitment to improve NMFS structure, processes and business approaches to meet the mission of sustaining the Nation's living marine resources. This initiative will further improve NMFS' science, management, and enforcement programs and continue rebuilding its aging infrastructure. These improvements will result in measurable progress in rebuilding or rehabilitating and sustaining the biological and economic health of fisheries and protected species in the United States. Increased funding for improved data collection by NMFS, industry and state partners, more accurate stock assessment models, and better management processes that synthesize information into successful public policies are essential to achieving its legislative mandates of building sustainable fisheries, sustaining healthy coastal ecosystems, and enhancing the recovery of protected species. Furthermore, legislative changes will also be needed to solve the management problems in U.S. Fisheries. The Administration will propose that any reauthorization of the Magnuson-Stevens Fisheries Conservation and Management Act include authority for fishing quota systems within regional fisheries, including transferable quotas, where appropriate.

For FY 2003, NMFS requests a total of \$741.2 million: \$603.5 million in the ORF account, \$17.0 million in the PAC account, and \$120.8 million in other related accounts. The ORF total includes an increase of 108 FTE and \$24.2 million over the FY 2002 Enacted level.

Significant Adjustments-to-Base

Mandatory Pay and Inflationary Costs: \$28.2 million

NOAA requests a net increase of \$0.6 million to fund Adjustments-to-Base (ATBs) and 21 FTE for NMFS base activities. The increase will fund the estimated FY 2003 Federal pay raise of 2.6 percent and annualizes the FY 2002 pay raise of 4.6 percent, plus additional costs associated with expanding participation in the Department of Commerce Personnel Demonstration Project. The increase will also provide inflationary increases for non-labor activities, including service contracts, field office lease payments, and rent charges from the General Service Administration (GSA). Also included in this amount is \$15.5 which supports the Administration's proposal to fund all of the Civil Service Retirement System payments out of agency budgets.

Adjustments: -\$79.9 million

Program Transfer: +\$3.4 million

The NMFS base was also adjusted to transfer \$3.4 million associated with the Columbia River Facilities from the NOAA Facilities activity to the NMFS ORF account. These funds are for maintaining and extending fish mitigation efforts along the Columbia River.

Program Terminations: \$83.3 million

The FY 2003 request proposes to terminate \$83.3 million for projects funded in the FY 2002 appropriation. For additional details on program terminations see *Section 4: Table of Terminations*

Detailed Program Increases by Sub-Activity

Operations, Research, and Facilities (ORF)

Fisheries Research and Management Services

The total request of \$348.8 million represents an increase of \$6.1 million over the FY 2002 Enacted level for this subactivity. This subactivity is comprised of two line items: Science and Technology, and Conservation and Management. Together, funding from these line items is used to translate scientifically-credible information and analyses on the biological, economic, social, and ecological aspects of the Nation's fisheries resources into successful fisheries policy and regulatory programs. This is the foundation of NOAA's strategic plan goal of building sustainable fisheries. This science information is provided through various research, stock assessment, and data collection activities conducted by NMFS, states, interstate commissions, universities, and the fishing industry. Also included are activities to: determine the impacts of the incidental taking of marine mammals and endangered species in fishing operations; develop forecast models for marine resource populations, ecosystems, and fishery systems; improve the quality and timeliness of information on living marine resources and their habitats.

Science and Technology

The total request of \$237.7 million reflects an increase of 37 FTE and \$7.2 million over the FY 2002 Enacted level for Fisheries Science and Technology. This level of funding will continue to support many of the programs funded in FY 2002 including: \$5.2 million for west coast groundfish research, \$1.0 million for the Fisheries Oceanography Program, \$17.0 million for observers, \$9.5 million for Cooperative Research activities, \$5.0 million for red snapper research, and \$1.0 million to continue implementation of National Standard 8 of the Magnuson-Stevens Act. Below are details outlining the increases within the FY 2003 request for Fisheries Research and Management Services, Science and Technology:

Modernize annual stock assessments: \$11.9 million

The total request of \$11.9 million represents an increase of 26 FTE and \$9.9 million above the FY 2002 Enacted level of \$2.0 million. This request comprises a long-term blueprint for raising the standard of best scientific advice on stock abundance. Funding will allow for NMFS to conform to new national stock assessment standards of data quality, assessment frequency, and advanced modeling. An increase of \$5.1 million is requested to provide for the recruitment and training of stock assessment biologists and supporting staff to produce annual stock assessments that meet the new standard for Federally managed stocks. The request would also add an increment of 260 Fisheries vessel/charter days at sea toward the balance of 3,000 days identified in the NOAA Fisheries Data Acquisition Plan at a cost of \$2.4 million. The initiative includes \$0.9 million for advanced sampling technologies. This element targets improvements in and innovative uses of existing technologies, in including the application of new and advanced

\$348.8 million

\$237.7 million

sampling systems and approaches. Also included in this request is \$1.5 million to enhance fisheries oceanography studies, principally, the Fisheries and the Environment program (FATE). These studies are aimed at understanding the effects of climate on fish stocks.

Socioeconomics: \$4.0 million

The total request of \$4.0 million for fisheries socioeconomics programs represents an increase of 7 FTE and \$1.5 million over the FY 2002 Enacted level. Funding will support the on-going development of a multi-year comprehensive social sciences program to support NMFS policy decisions. The approach is 3-tiered, augmenting the integral components of a successful social sciences program which includes staffing (7 FTE); data collection, and research activities. In combination, the funding will be used to continue addressing shortcomings in economic and social assessments of policy alternatives by improving the economic and social science staff capability, and initiation of data and applied research programs.

National Observer Program: \$4.0 million

The total request of \$4.0 million for the National Observer Program represents an increase of 4 FTE and \$3.2 million over the FY 2002 Enacted level. Funding will be used to expand the collection of high quality fisheries and environmental data from commercial and recreational fishing vessels to assess impacts on marine resources and fishing communities and to monitor compliance with marine resource laws and regulations. This request will primarily provide for approximately 4,000 observer sea days spread over 11 fisheries, most of which are currently unobserved. In addition, the increase will support improvements in data management; outreach; national coordination of policies and practices; and production of educational materials. Additional observer funding of \$13.0 million for specific fisheries and other areas is also included in the NMFS base request.

Conservation and Management

\$111.1 million

The request of \$111.1 million for Fisheries Conservation and Management represents a decrease of \$1.1 million from the FY 2002 Enacted level. Below are details outlining the FY 2003 request for Fisheries Research and Management Services, Conservation and Management:

• NMFS National Environmental Policy Act (NEPA) Implementation: \$8.0 million

The total request of \$8.0 million for NMFS NEPA represents an increase of \$3.0 million over the FY 2002 Enacted level. With the current amount of litigation pending, NMFS must continue to strive to enhance its management of the NEPA process. This funding will provide NMFS with the necessary resources to continue to support agency-wide NEPA activities not only to make recommendations on how to make its decisions less susceptible to litigation but to more fully take advantage of the decision making tools provided by NEPA.

• Regional Fishery Management Councils: \$16.0 million

The total request of \$16.0 million for the Regional Fishery Management Councils represents an increase of \$1.8 million over the FY 2002 Enacted level. This request will provide needed resources for the Councils to respond to increased workload in developing, implementing, and supporting management measures to eliminate overfishing and rebuild overfished stocks; identify and protect essential fish habitats; reduce fisheries' bycatch to the maximum extent practicable;

and minimize the impacts of fishing regulations on fishing communities. These results will be achieved through the development of amendments to and creation of new Fishery Management Plans and regulations and corresponding and supporting international management measures to control fishing activities.

Protected Resources Research and Management Services \$157.2 million

The total request of \$157.2 million for Protected Resources Research and Management Services represents an increase of \$6.5 million from the FY 2002 Enacted level. The goal of this subactivity is to provide accurate and timely analyses on the biological and ecological aspects of conservation of the Nations living marine resources to produce policies that support the NOAA strategic plan goal to recover protected species. This subactivity is comprised of two line items: Science and Technology, and Conservation and Management. Together these line items support research and management programs focused on protection, recovery and conservation of protected living marine resources and the environment upon which they depend.

Science and Technology

The total request of \$103.9 million reflects an increase of 13 FTE and a decrease of \$5.2 million from the FY 2002 Enacted level for Protected Resources Science and Technology. This level of funding will continue to support many of the programs funded in FY 2002 including: \$22.2 million for Steller Sea Lion Recovery Plan activities; \$44.5 million for Endangered Species Act Recovery Plan activities; \$3.0 million for Hawaii Sea Turtle research, and \$12.0 million for Marine Mammal Protection Act programs. Below are details outlining the increases within the FY 2003 request for Protected Resources Research and Management Services, Science and Technology:

• Cooperative Conservation and Recovery with States: \$1.0 million

The request of \$1.0 million will provide funds to state partners under the Endangered Species Act Section 6 cooperative conservation program. These agreements will provide the means for states and local communities to undertake local initiatives in the management and recovery of ESAlisted and candidate species by providing the legal authority to make the decisions about how best to protect species at risk of extinction. The agreements would provide funding on a 4:1 matching basis to accomplish conservation activities. Funding provided to the states would support local researchers, non-governmental organizations and volunteers to accomplish monitoring, restoration, science and conservation activities.

These actions will focus on recovery program needs agreed to by NOAA and state partners, whose performance would be evaluated annually. NOAA has ESA section 6 cooperative agreements with Massachusetts, New York, Maryland, Georgia, North Carolina, and South Carolina and is reviewing applications for agreements with Maine, Florida, the U.S. Virgin Islands, Puerto Rico, and New Jersey.

• Sea Turtle Research: \$5.9 million

\$103.9 million

The total request of \$5.9 million for ESA Sea Turtle Research represents an increase of 3 FTE and \$1.4 million over the FY 2002 Enacted level. Funds will be used to continue necessary research to recover highly endangered sea turtles around the country and internationally. Funds will allow for the protection of the globally imperiled populations of green, hawksbill, olive ridley, loggerhead, and leatherback sea turtles from extinction. This program is designed to assist in the collection of information on biology and habitats and share that information with other countries.

• Recovery of Endangered Large Whales: \$1.0 million

The request of 1 FTE and \$1.0 million will provide resources to scientifically determine whether two key endangered whales - humpbacks and bowheads - have recovered and are candidates for delisting. This information will enable NOAA to detect changes in the status of large whales and prevent any long-term irreversible damage to these populations.

Columbia River Biological Opinions (BiOps) Implementation: \$10.0 million

The request of 9 FTE and \$10.0 million will provide for the research, monitoring, and evaluation (RM&E) necessary to continue implementation of measures included in the Columbia River Biological Opinion. The RM&E program will provide the scientific information necessary to assess whether the BiOps performance measures are being achieved at 2003, 2005, and 2008 check-ins. This funding also provides for the research needed to address key uncertainties identified in the BiOps in the areas of estuary and near-shore ocean survival, delayed effects related to dam passage, and the effects of hatchery programs on the productivity of naturally spawning fish. This request is a separate but complimentary component to the Columbia River BiOps Implementation request (\$2.0 million) within the Protected Resources Research and Management Services, Conservation and Management line item.

Conservation and Management

\$53.3 million

The total request of \$53.3 million for this line item represents an increase of 24 FTE and \$11.8 million over the FY 2002 Enacted level for Protected Resources Research and Management Services, Conservation and Management. The request continues funding of \$5.9 million for Atlantic Right Whale activities and \$1.0 million for Alaskan Native Marine Mammal activities. Below are details outlining these increases:

• Statutory and Regulatory Requirements: \$1.5 million

The request of 15 FTE and \$1.5 million for a total of \$2.6 million will provide for thorough, complete, and timely environmental and economic analyses to NOAA customers and for its recovery programs. Funds are requested as part of the Conservation and Management base line item and will support personnel in all NMFS regions, science centers and headquarters to conduct required data gathering, analysis, and document preparation to assess the impacts of human activities that affect protected species. These include the range of Federal actions, including management of marine fisheries. This funding will also support assessments of the environmental and socioeconomic impacts, costs and benefits of implementing conservation programs for protected species.

Columbia River Biological Opinions (BiOps) Implementation: \$2.0 million

NOAA requests \$2.0 million and 9 FTE to provide staff needed by NMFS to ensure subbasin planning and hatchery reform development and application in recovery planning, and that flow, passage, and screening enhancements in priority watersheds are reviewed and implemented in a timely manner. The additional staff also will ensure documentation and early-alerts on progress toward attainment of performance measures at the 2003, 2005 and 2008 check-ins. This request is a separate but complimentary component to the Columbia River BiOps Implementation request of \$10.0 million within the Protected Resources Research and Management Services, Science and Technology line item.

Recovery of Highly Endangered Sea Turtles: \$0.6 million

The request of \$0.6 million will provide for activities necessary to recover highly endangered sea turtles including green, hawksbill, olive ridley, loggerhead, and leatherback sea turtles. Funding is requested as part of the Conservation and Management base line item and is a complimentary component to the research funds requested under the Protected Resources Research and Management Services, Science and Technology line item. This funding would support implementation of identified management strategies to reverse population declines, implementation of multi-lateral international agreements, and build additional recovery capacity through domestic and international educational and outreach programs.

Habitat Conservation Research and Management Services \$46.4 million

The total request of \$46.4 million for this subactivity represents an increase of \$1.9 million over the FY 2002 Enacted level. The goal of this subactivity is to maintain high economic and ecological productivity of the Nation's living marine resources and support the NOAA strategic planning goal to build sustainable fisheries, recover protected species, and sustain healthy coasts. The FY 2003 request continues to support programs funded in the FY 2002 appropriation, including: \$3.4 million for Chesapeake Bay programs and \$11.0 million for Coral Reef activities.

Sustainable Habitat Management

The total request of \$33.2 million for this line item represents an increase of 13 FTE and \$6.7 million over the FY 2002 Enacted level. Below are details outlining the FY 2002 request for the Sustainable Habitat Management Programs:

\$33.2 million

• Energy Permit Rapid Response: \$2.0 million

The request of 13 FTE and \$2.0 million will support establishment and implementation of a streamlined energy permit review process. This proposal responds to an Executive Order directing Federal agencies to expedite permits and coordinate Federal, state, and local actions needed for energy-related project approvals on a national basis and in an environmentally sound manner. The goal of this request is to reduce, by 25%, the time required to adjust the permits of licensed energy projects/facilities. Currently, re-licensing of existing facilities takes 6-10 years. It is anticipated that the combination of regular re-licensing and permit adjustments to implement the new National Energy Policy will result in thousands of new actions for NOAA nationally.

Enforcement and Surveillance

\$51.0 million

The total request of \$51.0 million represents an increase of \$9.7 million over the FY 2002 Enacted level for Enforcement and Surveillance activities to modernize NMFS' fisheries and protected species enforcement programs. Of this increase, \$5.4 million, is needed for additional support, continued modernization and expansion of the vessel management system (VMS) program to monitor approximately 1,500 vessels. VMS technology is an invaluable tool for modern fisheries management. It provides outstanding compliance without intrusive at-sea boardings, enhances safety at sea, and provides new tools to managers for real time catch reporting.

The remaining \$4.3 million, is requested to expand and modernize enforcement programs. These programs include, Alaska and west coast groundfish enforcement, protected species enforcement, state and local partnerships, specialized Magnuson-Stevens Act investigatory functions, community oriented policing and problem solving, and swordfish/Patagonian toothfish import investigations.

The request continues the \$15.0 million Partnerships in Enforcement Program funded in the FY 2002 appropriation.

Procurement Acquisition and Construction Account (PAC)

Construction

\$17.0 million

The total request of \$17.0 million for this activity represents a decrease of \$20.2 million from the FY 2002 Enacted level.

Honolulu Facility: \$15.0 million

NOAA requests a total of \$15.0 million to continue efforts addressing replacement of the Honolulu Laboratory including expanded coral reef activities. This request represents an increase of \$12.0 million over the FY 2002 Enacted level. Compliance with current building code and disability standards continues to be a serious concern. This funding will enable the project to partially proceed with work needed to correct several deficiencies, such as overcrowding, lack of laboratories, and inadequate or nonexistent handicapped access.

Galveston Laboratory: \$2.0 million

laboratory. Funds requested will complete mechanical work required on building 306 which will house 25 fishery scientists, technicians, and observers. This request would also partially complete work required on buildings 304 and 305 which will include badly needed conference and storage facilities. Building 306 is in danger of collapse and is currently not occupied. Therefore, personnel have been relocated into laboratory facilities resulting in severely reduced capacity for fisheries research and chemical analyses.

NOAA requests a total of \$2.0 million to continue rehabilitation of the Galveston, Texas, fishery

Other Accounts:

Fishermen's Contingency Fund (FCF)

The total request of \$0.9 million continues this fund at the FY 2002 Enacted Level. Title IV of the Outer Continental Shelf Lands Act Amendments of September 18, 1978, (P.L. 95-372, Section 402) as amended, established the Fisherman'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.

Foreign Fishing Observer Fund (FFOF)

The total request of \$0.2 million continues this Fund at the FY 2002 Enacted level. The Foreign Fishing Observer Fund provides observer coverage of foreign fishing activities within the 200-mile Exclusive Economic Zone (EEZ). The Fund is supported, 100 percent, 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 (the Supplemental Observer Program). Appropriated funds plus direct contracting under the Supplemental Observer Program will provide 100 percent observer coverage.

Fisheries Finance, Program Account

NOAA requests a total of \$-0.1 million for the Fisheries Finance, Program Account. This request includes a rescission of \$0.3 million from unobligated balances of prior year funds available for the crab fishery buyback subsidy loans. The net effect of this rescission in FY 2003 would leave approximately \$0.3 million in the program account, which is sufficient to cover the costs associated with loan levels planned in FY 2003 (\$5.0 million IFQ and \$19.0 million traditional). 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. 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, from loan guarantees. The loans awarded under the base Fisheries Finance Program can be used to provide long-term fisheries loans for vessels and shore-side facilities (including aquaculture facilities) and for industry-funded capacity reduction programs.

\$-0.1million

\$0.2 million

\$0.9 million

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

The American Fisheries Promotion Act (AFPA) of 1980 authorized a grants program for fisheries research and development projects 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 being transferred to the Department of Commerce from the Department of Agriculture. FY 2003 estimates this transfer at \$79.1 million. Of this amount, \$4.1 million is estimated to be used for the S-K grants program to develop a healthy fishing industry (including costs of program administration). In FY 2003 a portion of these grants, pending availability of funds, will be made available for Atlantic salmon conservation and recovery activities. The remainder of the transfer (\$75.0 million) will be used to offset the Operations, Research, and Facilities (ORF) account.

Pacific Coastal Salmon Recovery Program

The total request of \$90.0 million represents a decrease of \$20.0 million from the FY 2002 Enacted level. The states and tribes will use these funds for habitat restoration and protection, research and enhancement, monitoring and evaluation, and salmon recovery planning and implementation. These funds will be used to enhance Pacific Coastal Salmon for the purpose of helping share the costs of state, tribal and local conservation initiatives. Programs funded within this account will bolster existing State and tribal capabilities to assist in the conservation of Pacific salmon runs, some of which are at risk of extinction in the states of California, Oregon, Washington, and Alaska. Funds provided to these states will have at least a 25 percent match. Funds provided to Pacific coastal and Columbia River tribes do not require matching dollars. This budget responds to current and proposed listings of coastal salmon and steelhead runs under the Endangered Species Act by forming lasting partnerships with states, local and tribal governments and the public for saving Pacific salmon and their important habitats.

Pacific Salmon Treaty

The total request of \$20.0 million represents a decrease of \$27.4 million from the FY 2002 enacted level. This level of funding will provide \$10.0 million to capitalize the Southern Boundary Restoration and Enhancement Fund and \$10.0 million to the Northern Boundary and Transboundary Rivers Restoration Fund. The treaties are also supported by funds from the State Department. FY 2003 represents the last year of funding required to fully fund the Northern and Southern Funds at a total of \$75.0 million and \$65.0 million respectively. The two endowment funds are administered by the Pacific Salmon Commission for habitat, stock enhancement, science and salmon management initiatives in the United States and Canada.

Environmental Improvement and Restoration Fund

NMFS requests \$5.6 million out of a total NOAA request of \$11.1 million for the Environmental Improvement and Restoration Fund (EIRF). The other half of the EIRF is described under the National Ocean Service. The EIRF was created by the Department of the Interior and the Related Agencies Act of 1998 for the purpose of carrying out marine research activities in the North Pacific. The EIRF provides funds for the purpose of carrying out marine research activities in the North Pacific. These funds will provide grants to Federal, state, private or foreign organizations or individuals to conduct research activities on or relating to the fisheries or marine ecosystems in the North Pacific Ocean, Bering Sea, and Arctic Ocean.

58

\$20.0 million

\$5.6 million

\$90.0 million





Oceanic and Atmospheric Research

Total Request: \$307,546,000

ORF: \$296,962,000 PAC: \$10,584,000

The Office of Oceanic and Atmospheric Research (OAR), "NOAA Research," conducts the scientific research, environmental studies, and technology development needed to improve NOAA's operations and broaden our understanding of the Earth's atmospheric and marine environmental systems. NOAA Research currently contributes directly to the attainment of six of the seven goals of NOAA's strategic plan, which articulates NOAA's mission to support the Nation's economic growth in an environmentally sound manner.

The NOAA Research budget activity supports joint programs with other Federal agencies, including the U.S. Weather Research Program, U.S. Global Change Research Program, Health of the Atmosphere, and Ocean Exploration. NOAA Research also leads in programs such as Climate Observations and Services, High Performance Computing and Communications, and other environmental programs that examine a



number of climate, atmospheric and ocean interactions.

A coordinated national network of Federal laboratories and university partnerships carries out the NOAA research mission. Located in NOAA Research Laboratories, Office of Global Programs, Undersea Research Centers, and university-based Joint and Cooperative Institutes, NOAA Research personnel are internationally recognized for their contributions to such fields of science as oceanography, climatology, and meteorology. These dedicated scientists translate new discoveries and technological developments into improvements to NOAA's operations in weather, climate, and solar-terrestrial forecasting; coastal resource conservation; fisheries enhancement; and other areas. NOAA Research provides the sound science upon which decision makers can frame effective regulations to solve such environmental problems as the rehabilitation of the ozone layer. NOAA Research promotes economic growth by developing new products and techniques in marine biotechnology and aquaculture and improving economic resilience by improving the lead-time, accuracy, and specificity of climate and weather predictions. Ultimately, NOAA Research is dedicated to promoting the environmental sustainability of our Nation's economic competitiveness and well-being.

The total request of \$307.6 million for the OAR Budget Activity represents a level of funding of \$76.2 million less than the FY 2002 Enacted level. This continued investment will provide the resources necessary to continue vital research in fields ranging from climate and air quality to the oceans and Great Lakes. This request consists of program increases of \$29.0 million, and program decreases of \$68.7 million, program terminations of \$45.3 million, a program transfer to the NWS of \$2.3 million, and an increase of \$11.1 million for adjustments-to-base.



Adjustment to Base for Mandatory Pay & Inflationary Costs: +\$11.1 million

Significant Adjustments-to-Base

NOAA requests an increase of \$11.1 million to fund mandatory adjustments to base for OAR activities. The increase of \$5.0 million will fund the estimated FY 2003 Federal pay raise of 2.6 percent and annualize the FY 2002 pay raise of 4.6 percent. The increase will also provide mandatory inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration (GSA). Also included in this amount is \$6.1 million, which supports the Administration's proposal to fund all of the Civil Service Retirement System payments out of agency budgets.

Mandatory Pay, Inflationary Costs: \$5.0 million

OAR requests \$5.0 million in base adjustments to recapitalize OAR programs to cover the increased costs of pay, benefits, and other program costs. Failure to receive these adjustments in any given year results in program cutbacks that severely hamper OAR's ability to meet research goals. Failure to receive these adjustments over time has a cumulative impact that is programmatically devastating because funding must be diverted from research to cover increased operating costs.

Transfer of the National Tsunami Hazard Mitigation Program: \$2.3 million

OAR requests a base transfer of \$2.3 million to the National Weather Service for the Tsunami Hazard Mitigation Program. The Tsunami Hazard Mitigation program seeks to reduce the destructive impact of tsunamis in Hawaii, California, Oregon, Washington and Alaska through research and development aimed at improving the speed and accuracy of tsunami warnings. Initial research has been focused on development of deep ocean tsunami detection buoys and tsunami inundation mapping. The program has also been upgrading existing seismic networks in Alaska, Washington, Oregon, California and Hawaii, designing prototype data and earthquake products for the two NOAA warning centers, creating an inventory of existing mitigation materials and developing a strategic implementation plan for coordination among Federal, State, and local agencies. Now that the tsunami detection buoy development is complete and the technology is operational, funds for this program should be transferred into the NWS.

Terminations:

The FY 2003 request proposes to terminate \$28.9 million for projects funded in the FY 2002 appropriation. For additional details on program terminations see Section 4: Table of Terminations.

Detailed Program Changes by Sub-Activity

Operations, Research and Facilities (ORF)

Climate Research:

The total request of \$171.0 million for this subactivity represents an increase of \$20.8 million over the FY 2002 Enacted level. This continued investment in Climate Research focuses on learning the physical processes of the ocean and atmosphere and their relationship to weather and long-term climate change to increase modeling accuracy, thus furthering NOAA's predictive capabilities. Within this total, the following increases are included:

Laboratories & Joint Institutes:

NOAA requests a total of \$54.6 million for the NOAA Research laboratories and Joint Institutes conducting climate research. This request is \$5.4 million above the FY 2002 enacted level. The highlighted increases below are for the long-term observing systems that directly support the President's climate initiative.

Atlantic Oceanographic Monitoring Laboratory (AOML): \$6.7 million

The total request of \$6.7 million for AOML represents an increase of \$1.0 million above the FY 2002 enacted level. The \$1.0 million investment consists of \$0.4 million for ATB's, \$0.4 million for the CSRS legislative proposal, and \$0.2 million for NOAA's long term observing systems. The \$0.2 million investment will be used to maintain operation of the Global Ocean Observing System (GOOS). The GOOS Center uses expendable probes [Expendable Bathythermograph (XBT) and Expendable Conductivity Temperature Depth (XCTD) probes] and other equipment to provide ocean sub-surface temperature, salinity, and depth data to the National Weather Service's National Centers for Environmental Prediction (NCEP) in support of seasonal to interannual climate forecasts, as well as data for decadal-scale climate research. This funding will restore the number of XBT and XCTD probes deployed as stipulated in our international commitment and thus improve the quality of the data provided to NCEP and the international community for research.

Climate Monitoring Diagnostic Laboratory (CMDL): \$6.8 million

The total request of \$6.8 million is \$0.8 million above the FY 2002 enacted level. The \$0.8 million investment consists of \$0.3 million for ATB's, \$0.4 million for the CSRS legislative proposal, and \$0.1 million for NOAA's long term observing systems. The \$0.1 million investment will be used to recapitalize equipment and personnel for two networks CMDL operates. The first network measures 15 gases in the atmosphere that affect stratospheric ozone or climate at four baseline observatories, and at Niwot Ridge, CO. The second network is CMDL's Global Air Sampling network in which weekly samples of air are collected in individual flasks at over 60 locations spanning the globe for carbon and halocarbon measurements. These monitoring programs underpin major international policies regarding recovery of the ozone hole

\$171.0 million

\$54.6 million

and regulation of greenhouse gases. The impact of not obtaining this funding will be a diminished quality of a large number of observations and analyses of these gases.

Pacific Marine Environmental Laboratory (PMEL): \$9.6 million

The total request of \$9.6 million is \$1.0 million above the FY 2002 enacted level. The \$1.0 million investment consists of \$0.4 million for ATB's, \$0.4 million for the CSRS legislative proposal, and \$0.2 million for NOAA's long term observing system. The \$0.2 million investment will be used to recapitalize the Tropical Atmosphere Ocean (TAO) array. TAO is the NOAA-supported component of the TAO/TRITON buoy array. TAO is the cornerstone of the El Niño/Southern Oscillation (ENSO) Observing System and other ocean observing systems. The entire TAO/TRITON array consists of approximately 70 moorings in the Tropical Pacific Ocean, that transmit oceanographic and meteorological data to shore in real time via the Argos satellite system. The portion of the TAO array presently maintained by PMEL consists of 55 moorings. With no new funds to recapitalize this program, moorings would need to be decommissioned at a rate of about 2 per year. Any reduction in the number of mooring sites will reduce capacity to forecast El Niño/La Niña events which potentially impact billions of dollars in the U.S. economy and cause hundreds of fatalities.

Climate Observations & Services:

The total request of \$41.6 million is \$18.0 million above the FY 2002 enacted level. This continued investment in climate change research supports the first year of NOAA's participation in the President's multi-agency Climate Change Research Initiative. This will be a multi-agency effort with a strong focus on outcomes and will seek to advance climate modeling capabilities and to develop a climate observing system. Specific details can be found in Section 1 under the Climate Services crosscut.

Other Partnership Programs:

The total request of \$2.0 million is \$1.75 million less than the FY 2002 enacted level. NOAA requests \$2.0 million in support of the Study of Environmental Arctic Change (SEARCH) to improve monitoring of the elements of the Arctic environment. NOAA's SEARCH activities are part of a coordinated interagency and international program, begun in response to evidence of an alarming rate of environmental change occurring in the Arctic. This initiative consists of improving detection of environmental Arctic change at the air/ice/ocean interface, improving detection of environmental Arctic change in the lower and upper atmosphere, and analysis of Arctic measurements made by NOAA satellites. The SEARCH initiative will substantially increase understanding of long-term trends in temperature, precipitation and storminess across the U.S., with potential resulting improvements in forecasting and planning for energy needs, growth seasons, hazardous storm seasons and water resources. Improved detection of change at the Arctic air/ice/ocean interface will provide oceanographic information critical to management of high latitude fisheries, marine mammals and other protected species.

\$41.6 million

\$2.0 million

Weather and Air Quality Research:

The total request of \$59.1 million for this subactivity represents an increase of \$3.6 million over the FY 2002 Enacted level. This continued investment in Weather & Air Quality Research focuses on providing the Nation with more accurate and timely weather warnings and forecasts and providing the scientific basis for better air quality. Within this subactivity, the following increases are requested:

Laboratories & Joint Institutes:

The total request of \$48.1 million is \$4.2 million above the FY 2002 enacted level for the NOAA Research Laboratories conducting weather and air quality research. This investment is for recapitalization of the operational scientific activities being conducted. Details on the highlighted increases are as follows:

Forecast Systems Laboratory (FSL): \$11.9 million The total request of \$11.9 million is \$1.2 million above the FY 2002 enacted level. The \$1.2 million investment consists of \$0.4 million for ATB's, \$0.6 million for the CSRS legislative proposal, and \$0.2 million for the NOAA Wind Profiler Network. This investment will be used to recapitalize the FSL wind profiler network through funding replacement parts and contractor salary costs. The Wind Profiler Network consists of 35 profilers in the United States. The National Weather Service is the primary customer for the wind, temperature, and other surface meteorological measurements from the profilers. These measurements are critical to tailor model guidance to local conditions for issuance of forecasts, watches and warnings of severe weather. This funding will go toward replacement parts and to hire one contractor position to support network maintenance. Failure to secure this additional base funding will result in profilers experiencing significant downtime or eventually becoming decommissioned.

Space Environment Center (SEC): The total request of \$8.2 million is \$0.9 million above the FY 2002 enacted level. The \$0.9 million investment consists of \$0.3 million for ATB's, \$0.4 million for the CSRS legislative proposal, and \$0.2 million to recapitalize NOAA's Space Weather Program. SEC is solely responsible for data assimilation and forecasting for NOAA's Space Weather program. The Center is responsible for the quality and quantity of space-weather observations from NOAA and NASA satellites, and ingesting, processing, verifying, storing, and disseminating critical data from other agencies through its operational system. This funding will allow SEC to vastly improve its space weather forecasting of solar events that impact electrical power delivery, communications for high latitude airline flights, and satellite communications by incorporating new data from NOAA and NASA satellites.

U.S. Weather Research Program (USWRP):

The total request of \$10.0 million is \$0.3 million less than the FY 2002 enacted level. This continued investment is for conducting research and development on experimental numerical model algorithms, field observational support, and for information and technology transfer to operations and services in order to improve Hurricanes at Landfall predictions, improving weather forecast leading more efficient energy production management, and improve our understanding of data used from advanced observing systems for improved numerical weather prediction. Specifically, the program increases consist of:

\$48.1 million

\$59.1 million

\$8.2 million

\$10.0 million

USWRP (Base):

The total request of \$3.9 million is \$1.1 million above the FY 2002 enacted level. This increase consists of \$0.1 million for ATB's and the CSRS legislative, and \$1.0 million for base operations. This investment will support transition research and development in order to reach the USWRP initial goals of improving forecasts of inland heavy precipitation associated with landfalling hurricanes. The increase will be used to address the improvement of the forecasts of heavy and, often, flood-producing rains associated with hurricanes and tropical storms as they move inland. To address this goal, initial investments will be made in improving atmospheric boundary layer observations along the coast and inland, regional and fine scale modeling, and model test and evaluation.

Energy Security Program:

\$6.1 million

\$3.9 million

NOAA requests \$6.1 million for a pilot program in the southeast to provide weather and hydrologic forecasts to assist the operations of the U.S. energy sector. With national implementation of this program, NWS forecasters will improve daily temperature forecasts by over 2 degrees Fahrenheit. This will provide a significant benefit to the U.S. economy. Based on industry estimates, this investment will result in annual savings of \$10 to \$30 million in the pilot region after the second year of the demonstration. Expanding the pilot program nation-wide could generate savings of over \$1 billion per year. In FY 2003, NOAA will install the necessary observing equipment and forecast technology to improve forecasts which will allow improved load forecasting in FY2004. This is a joint effort between OAR and the NWS. The FY2003 President's request includes the following:

•NOAA will provide more accurate temperature and precipitation forecasts by improving real-time observations from the Cooperative Observer Network (COOP) and implementing higher resolution numerical weather prediction models (\$3.0 million). NWS will install new temperature and precipitation units at 200 sites which will result in improving temperature forecasts by 1.5° F by FY2004. NWS and OAR will also develop and implement higher resolution, local numerical weather prediction models at 12 sites which will result in an additional 0.8° F temperature forecast improvement (\$0.5 million).

•NOAA will improve sub-seasonal to seasonal temperature forecasts by reducing the uncertainty in seasonal forecasts and by improving extended range forecast guidance beyond week one for temperature and precipitation.

•NOAA will provide short- to long-range predictions of water flowing into major reservoirs generating hydroelectric power. NOAA will provide river forecasts up to six months ahead for major reservoirs, and will provide information describing the reliability of those forecasts, enabling hydropower reservoir operators to optimize their short-term power production and their long-term energy planning. NOAA will accomplish this by implementing the Advanced Hydrologic Prediction Services (AHPS) at 56 forecast points within the pilot region (\$2.6 million).

Other Partnership Programs:

The total request of \$1.0 million is \$0.4 million below the FY 2002 enacted level. This investment consists of \$1.0 million for Tornado/Severe Storm Research.

<u>Tornado/Severe Storm Research:</u> NOAA requests 2 FTE and \$1.0 million to develop new technologies for forecasting and detecting tornadoes and other forms of severe weather and to disseminate this information to emergency managers, the media, and the general public for

\$1.0 million

appropriate action. This initiative consists primarily of the construction and research support for a phased array radar test-bed at the National Severe Storms Laboratory in Norman, OK. Congress established a joint R&D program for NOAA, DOD and FAA to investigate the feasibility and benefits of using these military phased array radars for improving severe weather forecast and warning systems. U.S. Navy SPY-1 Phased Array Radar (PAR) technology holds considerable promise for making significant improvements to the existing WSR-88D system. Phased array radar has the potential to significantly extend lead times for tornadoes and other forms of severe and hazardous weather. Faster scan rates can reduce the time it takes to make a complete Doppler radar observation from six to less than one minute. Coupled with artificial intelligence based decision support systems, tornado lead times could be almost doubled from 12 to 22 minutes.

Ocean, Coastal, and Great Lakes Research: \$54.2 million

The total request of \$54.2 million for this subactivity represents a decrease of \$83.5 million from the FY 2002 Enacted level. This continued investment enhances our knowledge of ocean and Great Lakes environments so that they can be managed in a sustainable manner, promoting economic growth in marine industries while conserving the underlying environments and resources upon which these industries depend. Within this sub-activity are requests for the following:

Laboratories and Joint Institutes:

The total request of \$20.9 million is \$1.6 million above the FY 2002 enacted level. The increase consists of \$0.7 million for ATB's and \$0.9 million for the CSRS legislative proposal. NOAA's Ocean, Coastal, and Great Lakes Research programs seek to provide the information base to support policy and management decisions for protecting the quality and value of the Nation's marine and coastal resources; increase our understanding of coastal and marine processes for the purpose of predicting environmental changes; and provide the technical basis for enhancing the Nation's marine economic sector.

National Sea Grant College Program:

A decrease of 20 FTEs and \$62.4 million is requested to reflect the transfer of the National Sea Grant College Program from NOAA to the National Science Foundation (NSF). Funding for the program will be requested by NSF (\$57 million). It is proposed that NSF coordinate with NOAA in identifying research priorities.

National Undersea Research Program (NURP):

The total request of \$13.9 million is \$2.4 million less than the FY 2002 enacted level. NOAA's National Undersea Research Program (NURP) seeks to promote healthy coasts and effective management, foster ocean stewardship, explore our oceans and Great Lakes, develop appropriate technologies, and develop innovative education and outreach efforts.

Ocean Exploration:

The total request of \$14.2 million is \$0.2 million above the FY 2002 enacted level. Ocean Exploration is NOAA's multi-line office (OAR/NOS/NMFS) investment in undersea exploration, research, and technology in both the deep ocean and areas of special concern, such as the U.S. Exclusive Economic Zone (EEZ) and National Marine Sanctuaries (NMS). The Ocean Exploration program consists of four key objectives: 1. Mapping the physical, geological, biological, chemical and archaeological aspects of the oceans; 2. Exploring ocean dynamics and interactions at new scales to improve our understanding of the complex interactions in this vital component of the planet's life support system; 3. Developing new sensors and systems for ocean exploration to regain U.S. leadership in marine technology; 4. Reaching

\$0.0 million

\$20.9 million

\$13.9 million

\$14.2 million

out in new ways to stakeholders to improve the literacy of learners of all ages with respect to ocean issues.

Other Partnership Programs:

The total investment of \$5.1 million is \$20.6 million less than the FY 2002 enacted level. NOAA's Ocean, Coastal, and Great Lakes Research Other Partnership Programs seek to provide the information base to support policy and management decisions for protecting the quality and value of the Nation's marine and coastal resources, increase our understanding of coastal and marine processes for the purpose of predicting environmental changes, and provide the technical basis for enhancing the Nation's marine economic sector.

Procurement, Acquisition, and Construction (PAC) The total request of \$10.6 million represents a decrease of \$17.1 million from the FY 2002 Enacted level.

High-Performance Computing & Communications\$7.0 millionat the Geophysical Fluid Dynamics Laboratory (GFDL)\$7.0 million

The total request of \$7.0 million for GFDL is \$0.8 million less than the FY 2002 enacted level. This continued investment supports a very large, scalable computer system that provides critical computing, storage, and analysis capabilities, as well as model development and infrastructure support, to NOAA's Geophysical Fluid Dynamics Laboratory (GFDL) to advance the Nation's climate research. This computing program allows NOAA to leverage the world-class research staff and modeling capabilities now in place at GFDL to address important research problems in climate and weather research. The laboratory's on-going model development effort is positioning GFDL to take full advantage of the scalable architectures and to advance the Nation's climate research program through NOAA computational research and collaboration with the inter-agency and academic climate research community.

Comprehensive Large-Array data Stewardship System (CLASS)

\$3.6 million

\$5.1 million

The total request of \$3.6 million for CLASS continues level funding from the FY 2002 enacted level. This continued investment is for enhancing NOAA's current archiving capabilities into a CLASS System that is fully operational and managed at the enterprise level. This system will afford efficient management of high volumes of data that is critical to the U.S. Global Climate Change Research Program (USGCRP) and the scientific community. The target data originates from the National Polar-orbiting Environmental Satellite System, the Defense Meteorological Satellite Program, the Department of Commerce Next Generation Weather Radar, and Polar-orbiting Operational Environmental Satellite. Management of these data can be accomplished only through a rapid expansion in storage capacity at the Data Centers and automating the means of data ingest, quality control, and access through a phased systems buy. The early implementation of this archive and access system has paved the way to accommodate additional massive data volumes from the EOS satellites.

Detailed information regarding adjustments to base, program reductions and terminations are shown in Section 4 : Supplementary Information.


National Weather Service

Total Request: \$800,844,000

ORF: \$725,268,000 PAC: \$75,576,000

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

America's vulnerability to weather related hazards is rising as more of the population moves into weather threatened regions, and national and global economies become more complex. Approximately 40 percent of all Americans, some 100 million people, currently reside in areas of high risk to natural disasters, with the number climbing yearly. Today, 90 percent of all presidentially declared disasters are weather and flood related. During the next century, weather will continue to impact our lives and significantly impact the U.S. economy.

The NWS strives to continue to mitigate these impacts through improved weather warning and forecast services. Over the last 5 years the NWS has established specific service improvement performance goals and has met most of them through a focused emphasis on performance management and relating budgeted resources to performance. In fact, the NWS earned straight-A grades in a government management report card issued by Government Executive Magazine and George Washington University. Also, Office of Management and Budget Director Mitch Daniels honored the NWS as an agency that exemplifies the use of performance measures in management. With the FY 2003 budget, the NWS will continue to focus resources toward improving its core performance measures including: tornado warning lead times (11

minutes); flash flood warning accuracy (86%); winter storm warning accuracy (88%); 48 hour hurricane track error (138 nautical miles); 3 day precipitation forecast accuracy (19%); aviation ceiling and visibility forecast accuracy (19%); marine wind and wave forecast accuracy (54%); and U.S. seasonal temperature forecast accuracy (21 Heidke skill score).

The FY 2003 President's Budget Request supports the funding and program requirements to enable the NWS to better use science to serve our citizens and fulfill its vision of becoming America's "no surprise" weather service. This vision states the NWS will produce and deliver forecasts you can trust when you need them most, use cutting-edge technologies, provide services in a cost-effective manner, strive to eliminate weather related fatalities, and improve the economic value of weather information. In FY 2003, major NWS activities addressed in this budget include: accelerating nationwide implementation of the Advanced Hydrologic Prediction Service; beginning an Aviation Weather initiative; establishing a comprehensive facilities maintenance program; making operational the next generation weather and climate supercomputing system; implementing a supercomputing backup system; and completing implementation of the NWS telecommunications gateway backup facility.

Overall, NOAA requests a total of \$800.8 million for the National Weather Service, a net increase of \$57.8 million above the FY 2002 Enacted level. This continued investment includes a total of \$725.3 million for Operations, Research, and Facilities (ORF) and \$75.6 million for Procurement, Acquisition, and Construction (PAC). In FY 2003, the budget priorities for NWS include sustaining current services, replacing obsolete technology, enhancing services to the public and its private partners, and infusing new technology.

Mandatory Pay, Inflationary Costs, and Adjustment: \$52.3 million

NOAA requests an increase of \$23.8 million to fund adjustments to base for NWS activities. The increase will fund the estimated FY 2003 Federal pay raise of 2.6 percent and annualize the FY 2002 pay raise of 4.6 percent. The increase will also provide mandatory inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration (GSA). Also included in this amount of \$52.3 million is \$28.4 million which supports the Administration's proposal to fund all of the Civil Service Retirement System payments out of agency budgets.

Transfer of National Tsunami Hazard Mitigation Program: \$2.3 million

NOAA requests an increase of \$2.3 million to reflect the transfer of the National Tsunami Hazard Mitigation Program from the NOAA Office of Oceanic and Atmospheric Research (OAR) to the NWS. Funding this program in the NWS budget will enable the NWS to incorporate tsunami hazard mitigation services, developed by OAR over the past 6 years, into routine operations in support of the NWS tsunami warning function. These include: operations and maintenance support for deep-ocean assessment and reporting of tsunamis (DART) buoys, and deployed seismic networks; inundation modeling and mapping efforts; tsunami hazard mitigation programs; and emergency management coordination efforts. Incorporating tsunami hazard mitigation services into an operational environment will ensure continuity of warning services and will enhance public safety.

Terminations: -\$18.7 million

The FY 2003 request proposes to terminate \$18.7 million for projects funded in the FY 2002 appropriation. For additional details on program terminations see *Section 4: Table of Terminations*.

Detailed Program Changes by Sub-Activity

Operations, Research, and Facilities

The total request of \$725.3 million for operations and research represents an increase of \$52.9 million over the FY 2002 Enacted level. This continued investment will allow the NWS to maintain current services and provide improved weather warning and forecast services. Specifically, there are the following program changes: \$1.4 million to operate and maintain the new Huntsville, Alabama Weather Forecast Office, \$4.7 million to accelerate National implementation of the Advanced Hydrological Prediction Service, \$2.5 million for an Aviation Weather initiative, \$3.0 million for Weather Forecast Office (WFO) Maintenance, \$3.0 million to complete the National Weather Service Telecommunications Gateway Backup facility and transition into operations, and \$7.1 million for the Weather & Climate Supercomputer Backup. The specific details on each of these requests are outlined below:

Local Warnings and Forecast Base - Huntsville, AL Weather Forecast Office: \$1.4 million

NOAA requests \$1.4 million to pay for recurring operations and maintenance costs at the new Huntsville, AL Weather Forecast Office. The Huntsville WFO will be established in FY 2002 at the University of Alabama at Huntsville using \$3.0M appropriated funds provided in FY 2002. The \$1.4 million requested will provide for NWS employee salaries, facilities rent and maintenance, and operational equipment and supplies; all necessary costs to provide and operate and maintain weather forecast and warning services in the Huntsville area

Advanced Hydrologic Prediction Service (AHPS): \$6.2 million

NOAA requests an increase of \$4.7M over the FY 2002 Enacted level for a total of \$6.2 million to accelerate nationwide implementation of improved flood and river forecast services in the Northeast, Middle Atlantic, and Southeast, including the states of: New Hampshire, Vermont, Virginia, North Carolina, and South Carolina. This funding will also support continuing AHPS implementation in the Upper Mississippi and Ohio river basins. As implemented, AHPS will: 1) produce new information with better predictions of river height and flood potential to reduce loss of life and property; 2) deliver high resolution, visually oriented products to provide partners and customers with valuable information for life

decisions; 3) refresh aging hydrologic forecasting infrastructure to support rapid infusion of scientific advances; and 4) leverage NOAA's investments in observational systems and atmospheric models to enhance accuracy and resolution of river forecasts. AHPS recently demonstrated improvements in flood forecasting for the Red River of the North. The mid-March, 2001 AHPS 90 day outlook showed an 85%



chance Fargo, ND would experience major flooding. Three weeks later the Red River was at 20 feet

above flood stage in Fargo.

AHPS extends existing 1, 2, and 3 day river forecasts to 14 day and longer outlooks. This additional prediction information along with new high resolution products combine to deliver more accurate and comprehensive predictions of river height and flood potential; all using existing infrastructure and staffing levels. AHPS will greatly improve the Nation's capability to take timely and effective actions which will significantly mitigate the economic losses from major floods and droughts. AHP Services will reduce loss of life and property, mitigate flood damages (three fourths of all Presidential Disaster Declarations involve flood damages), save over \$750 million per year (over \$6 billion in flood damages and adverse impacts on river commerce occur annually), and significantly improve NOAA's capability to respond to prevalent challenges with energy production and water resource stewardship.

Aviation Weather: \$2.5 million

NOAA requests a total of \$2.5 million to initiate a 7-year plan to help improve U.S. aviation safety and economic efficiencies by providing state-of-the-art weather observation and forecast products responsive to aviation user needs. Weather accounts for over 70% of all air traffic delays which results in greater expenditures by both airline customers and the airlines. In addition, an average of 200 general aviation pilot fatalities per year are caused by weather-related accidents across the U.S. In response to these trends, a joint Government (DOT, DOC, NASA) and industry team on aviation safety recently recommended the following improvements: development and delivery of pilot-friendly, real-time depictions of weather hazards; a reduction in forecast errors while increasing the precision of aviation



parameters; and an improvement in weather training for controllers and pilots. This initiative will address the referenced aviation safety team recommendations and provide a means for the NWS to improve its aviation weather forecast services through three major components which include: 1) increasing the number and quality of aviation weather observations; 2) transitioning applied research efforts to operational products; and 3) developing and implementing new training programs for forecasters, pilots, and controllers. This initiative has the goal of a 10% reduction in National Airspace System weather-related air traffic delays, which would save \$600 million annually in potential economic losses, while also reducing general aviation weather related fatalities by 25%, or 50 lives annually. This initiative will

leverage the results of several different aviation weather research efforts and expedite the operational delivery of new forecast products tailored for improving pilot awareness and avoidance of aviation weather hazards.

Weather Forecast Office (WFO) Maintenance & Repair: \$7.3 million

NOAA requests an increase of \$3.0 million over the FY 2002 Enacted for a total of \$7.3 million for WFO

Maintenance. This continued investment will allow NWS to fund recurring maintenance contracts and address a backlog of over \$10 million in deferred maintenance repair actions. In FY 2003, the National Weather Service will begin implementation of a scheduled preventive facility maintenance program based on manufacturers' specifications and GSA/industry standards. Funds will also be dedicated to begin cyclical replacements and to address high priority backlog repair actions at 20 WFOs. The WFOs provide forecasters with modernized facilities, supporting the advanced technology systems and the provision of weather service to the public. As the WFOs continue to age, the facilities require a significant investment in recurring and cyclic maintenance, including replacement of major facility support systems such as power backup generators and uninterruptable power supplies. The request will allow NWS to protect the \$250 million capital investment in modernized facilities in accordance with GSA and private industry standards.

Systems Operation & Maintenance (O&M): \$93.3 million

The total request of \$93.3 million in Systems Operation and Maintenance (O&M) represents an increase of \$2.1 million over the FY 2002 Enacted level. This continued investment will provide the necessary resources to maintain these capital investments. The Systems O&M total also includes \$43.9 million for NEXRAD O&M, \$8.7 million for ASOS O&M, \$37.7 million for AWIPS O&M, and \$3.0 million for the NWS Telecommunications Gateway Backup.

NWS Telecommunications Gateway Backup (NWSTG): \$3.0 million

NOAA requests \$3.0 million for the National Weather Service Telecommunications Gateway Backup. During FY 03, this funding will enable the NWS to complete the establishment of the NWSTG facility at the Federal Emergency Management Agency's Mt. Weather Emergency Assistance Center in Berryville, VA. After scheduled deployment in early FY 2004, the \$3.0 million will cover recurring costs for NWSTG backup communications, system software licenses, systems operations and maintenance support, facility rent, and cyclical technology refreshment. This will ensure uninterrupted delivery of critical meteorological data necessary for the protection of life and property, and the economic well being of the Nation. The NWSTG backup operations will meet the operational availability requirement of 99.99%.

The current NWSTG facility, located within NWS Headquarters in Silver Spring, Maryland, has no operational backup. The NWSTG is a single point of failure, vulnerable to natural disasters, human error, computer viruses, hacker attacks, and terrorism. Today, if the NWSTG failed, more than 90 percent of the in situ weather observations necessary for production of numerical weather prediction models would be lost; no national radar or weather prediction models would be sent to external users; no weather observations and products would be sent to commercial users/vendors; access and exchange of weather observations and products with other Federal agencies and Nations would be severely limited; and all NWS centrally provided Internet-services would be halted. This funding will allow NOAA to ensure the reliability of the NWSTG and will allow the NWS to maintain operations should the NWSTG fail.

Procurement, Acquisition and Construction (PAC)

The total request of \$75.6 million represents an increase of \$4.8 million over the FY 2002 Enacted level. Of this request a \$7.5 million decrease is requested for the NWS Telecommunications Gateway

(NWSTG) Backup to reflect the completion of one-time costs associated with the planned acquisition and construction of backup infrastructure and facilities. The specific requests are listed below:

Systems Acquisition: \$64.9 million

NWS Weather and Climate Supercomputing: \$21.2 million

NOAA requests an increase of \$6.2 million over the FY 2002 Enacted level for a total of \$21.2 million to continue operations and maintenance of the current NWS IBM SP system (Class VIII) and to transition the next generation weather and climate supercomputing system into operations (system to be acquired and installed during FY 2002). The NWS supercomputer is the foundation for all NWS weather and climate forecasts. Operational transition of the next generation supercomputer will enable the NWS to improve the resolution and forecast accuracy of the following prediction models by FY 2004: medium range forecast (global) model from 80Km to 52Km; regional severe weather (eta) model from 12Km to 10Km; and the hurricane model from 18Km to 12Km. In addition, this investment will enable the NWS to upgrade its operational climate forecasting model to incorporate ocean temperature and current

influences, critical to predicting weaker El Niño and La Niña events and other climate oscillations.

NWS Weather and Climate Supercomputing Backup: \$7.1 million

NOAA requests \$7.1 million to implement an operational backup system for the NWS weather and climate supercomputer. The NWS weather and climate supercomputer is a critical component of NOAA's



mission and is currently a single point of failure as the entire system is located in a single facility. Many of the data, products and services provided by and through the Central Computer System (CCS) directly contribute to the issuance of life saving NWS watches and warnings to the public. The NWS weather and climate supercomputing backup system is a critical part of DOC's Homeland Security Initiative and NOAA's comprehensive business continuity plan, designed to support uninterrupted data and product delivery to NOAA customers. The National Center for Environmental Prediction's (NCEP) CCS is currently the only computer system within NOAA capable of running highly complicated forecasting models in the required operational (regimented) mode. During FY 2003 the NWS will acquire the necessary backup system hardware capability, conduct site selection, and install the backup.

Radiosonde Replacement Network: \$7.0 million



NOAA requests an increase of \$2.0 million over the FY 2002 Enacted level for a total of \$7.0 million to continue the replacement and modernization of the upper air radiosonde network,. The radiosonde network provides critical upper air observations for NWS weather forecasters and serves as the principle data source for all weather forecast models. The current network is obsolete and nearing collapse, risking widespread loss of data within the next two to three years. During FY03, the NWS will accelerate system deployment of radiosonde telemetry units with 21 sites vs. 12 sites (at \$5.0 million level); and begin use of Global Positioning Satellite technology radiosondes at sites as they become operational.

Next Generation Weather Radar (NEXRAD): \$8.2 million

NOAA requests \$8.2 million to continue level funding of NEXRAD product improvement (NPI) activities during FY 2003. The NPI program infuses new science and technology into the current radar network. During FY 2003 the NWS will begin full scale development of the open systems radar data



acquisition unit (ORDA). Upon its deployment in FY 2005 - 2007, ORDA will provide increased data resolution for detecting tornados and extend the effective range of the radar for predicting damaging winds. These advances in conjunction with open radar systems product generator technology (ORPG), deployed in FY 2002, and AWIPS Build 5 will result in improved warning lead times for tornadoes and improved forecast accuracy for severe thunderstorms and flash floods.

Automated Surface Observing System (ASOS): \$5.1

million

NOAA requests \$5.1 million to continue level funding for ASOS sensor improvement activities. The NWS is developing and implementing new ASOS sensor capabilities to meet user requirements and decrease maintenance demands. In FY 2003, NWS plans to complete acquisition of all-weather precipitation gauges. An additional 231 will be acquired for a total of 346. Of these, NWS will deploy 209 in FY 2003. NWS will also complete deployment of 314 dewpoint sensors, begin full scale development of enhanced precipitation identifier sensors and begin development of a 25,000 ft. ceilometer that will begin deployment in FY 2005. Each of these new sensors will improve the maintainability, measurement quality and utility, and will fully meet NWS and aviation weather observation requirements.



Advanced Weather Interactive Processing System (AWIPS)/NOAAPort: \$16.3 million

NOAA requests \$16.3 million to continue level funding for AWIPS development activities, associated hardware upgrades, and integration of improved NEXRAD data. In FY 2003, NWS will continue technology infusion activities to integrate improved radar data from the open systems radar product generator (ORPG), enhance data management capabilities, deliver required unique capabilities to NCEP and OCONUS regions, increase communications bandwidth to facilitate access to new radar and computer model data, and continue hydromet decision assistance development.

Communications and hardware capacity improvements will be facilitated by the continuing



implementation of LINUX technology at the WFOs. NWS will also complete implementation and begin operations of the AWIPS Network Control Facility backup facility in Fairmont, WV. This will mitigate the last single point of failure component in the AWIPS network (master ground station deployed in FY 2001) necessary to provide critical infrastructure protection. Combined with NEXRAD product improvement, AWIPS Build 5 capabilities and ongoing technology infusion programs will improve severe weather warning and forecast services.

Construction

NWS Weather Forecast Office (WFO) Construction: \$10.6 million

NOAA requests a total of \$10.6 million to continue level funding for critical facility modernization efforts in the NWS. In FY 2003, NWS plans to construct the new WFO facility in Key West, FL, continue nationwide WFO heating, cooling and air conditioning (HVAC) corrections, complete post construction facility preparations at the Alaska Tsunami Warning Center, complete WSO facility modernization at Nome, and Kotzebue, and begin architecture and engineering work for the new WSO facility at Annette.

Detailed information regarding adjustments to base, program reductions, and terminations are shown in Section 4: Supplementary Information.



GOES (I-M) Spacecraft

National Environmental Satellite, Data, and Information Service

Total Request: \$764,726,000

ORF: \$151,891,000 PAC: \$612,835,000

For FY 2003, the National Environmental Satellite, Data, and Information Service (NESDIS) requests \$764.7 million, of which \$151.9 million is requested in the Operations, Research and Facilities (ORF) account and \$612.8 million is requested in the Procurement, Acquisition and Construction (PAC) account. The following narrative describes NESDIS activities and its ORF and PAC account requests.

NESDIS operates the Nation's operational, environmental satellite system, composed of the Geostationary Operational Environmental Satellites (GOES) and the Polar-orbiting Operational Environmental Satellites (POES), providing the U.S. space-based component of a global environmental monitoring system. NESDIS also manages the largest collection of atmospheric, geophysical, and oceanographic data in the world. Additionally, on behalf of the Department of Commerce, NESDIS licenses the operation of private remote-sensing space systems.

NESDIS activities touch nearly all sectors of society in some way. NESDIS contributes to the national economy by providing environmental data for energy distribution, the development of global food supplies, and for the management of natural resources. NESDIS continuously observes our earth, our oceans, and our atmosphere and uses these observations to provide benefit to all people everyday. NESDIS also provides data and information to others so they can provide additional products and services. Examples include NOAA scientists issuing severe storm warnings, researchers studying the environment, and other national and international space agencies utilizing NESDIS data to enhance their missions. NESDIS satellite observations are an important contribution to U.S. national security, providing military users real-time environmental and near real-time information for aircraft, ships, and facilities around the world.

NESDIS benefits the Nation and the economy in the following ways:

- Geostationary satellites detect and track severe weather enabling forecasters to issue timely and accurate warnings and predictions, which reduce the loss of life and property.
- Polar satellite observations of global ocean temperatures make possible seasonal to interannual climate forecasts, with far-reaching economic implications for the agriculture, energy, water resources, and fishing industries.
- The use of NESDIS data creates fuel savings in the maritime industry by providing data used in changing ship routes to account for ocean current patterns. NESDIS data also identifies areas favorable to commercial fishing, previews hazardous storm conditions so that advisories may be issued, indicates windows for favorable winter operations before ice closes down shipping lanes, and helps ensure the safety of recreational boating.
- The agriculture industry uses NESDIS data to generate crop freeze warnings and recommendations for planting, and weed, and pest control. The data are also used to evaluate vegetative stress due to drought conditions.
- Commercial and general aviation are heavily dependent on satellite and ground-based environmental data to assess weather risks, make scheduling decisions, and establish safe and cost-efficient routes. Information on severe weather events such as hurricanes or natural disasters such as volcanic eruptions are examples of contributions NESDIS makes to the aviation industry.
- NESDIS provides national and international hazard monitoring activities, including an automated notification system for volcanic ash and advisory messages as well as experimental fire analysis to the National Weather Service. NESDIS also provides Operational Significant Event Imagery products for fire, hurricane, and volcanic ash events to disaster managers and the public.
- Information gathered from satellites regarding space weather and solar flares assists in warning industry and consumers about potential power and communications outages.

• The U.S. military frequently uses climatic data for national security. The NESDIS National Climatic Data Center supplies radar data to the U.S. Air Force for developing severe storm algorithms and supplies the U.S. Navy with marine weather observations, which the Navy uses in the design of ship hulls.

NESDIS contributes to the achievement of six of NOAA's Strategic Plan goals: Advance Short-Term Warning and Forecast Services, Implement Seasonal to Interannual Climate Forecasts, Predict and Assess Decadal to Centennial Change, Recover Protected Species, Sustain Healthy Coasts and Build Sustainable Fisheries.

Adjustment to Base for Mandatory Pay & Inflationary Costs: +\$10.7 million

SIGNIFICANT ADJUSTMENTS-TO-BASE:

NOAA requests an increase of \$10.7 million to fund adjustments to base for NESDIS activities. The increase will fund the estimated FY 2003 Federal pay raise of 2.6 percent and annualize the FY 2002 pay raise of 4.6 percent. The increase will also provide mandatory inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration (GSA). Also included in this amount is \$6.2 million, which supports the Administration's proposal to fund all of the Civil Service Retirement System payments out of agency budgets.

Non-Recurring Terminations: -\$5.0 million

NESDIS requests a decrease of \$5.0 million to reflect the termination of the following activities or programs: GOES Data Archive (-\$2.0 million) and the Regional Climate Centers (-\$3.0 million).

Detailed Program Changes by Sub-Activity Operations, Research and Facilities (ORF)

Environmental Satellite Observing Services: \$91.

\$91.8 million

NOAA requests a program increase of \$13.8 million over the FY 2002 enacted level for a total request of \$91.8 million in the Environmental Satellite Observing Service budget activity. This budget activity provides for the operation of current polar-orbiting and geostationary satellites, and the development, production, and distribution of satellite products for a wide range of Federal agencies, State and Local governments, and private users.

The goals of the Environmental Satellite Observing Systems include, (1) maintaining a system of polarorbiting satellites to obtain global environmental data; (2) maintaining a system of geostationary satellites to provide near continuous environmental observations of the Earth's western hemisphere; (3) acquiring, processing, and analyzing data from NOAA, DoD, and other Earth-observing satellites; (4) supplying data, interpretations, and consulting services to users; (5) introducing new technology and processes to improve environmental satellite system capabilities; (6) determining requirements for future satellite systems, (7) operating, maintaining, and serving as the lead U.S. agency for the Search and Rescue mission control center; and (8) demonstrating better ways to use and distribute data from NOAA, NASA, and other satellites, aircraft, and laboratory investigations.

The FY 2003 Environmental Satellite Observing Services request contains changes in the following subactivities:

- Satellite Command and Control
- Product Processing and Distribution
- Product Development, Readiness, and Application

Satellite Command and Control:

\$37.1 million

NOAA requests a program increase of \$4.7 million over FY 2002 enacted level for a total of \$37.1 million for Satellite Command and Control. This includes a program increase of \$2.5 million for Satellite Command and Control. This investment supports the operations of the NESDIS satellite systems, the ingesting and processing of satellite data, and the development of new product applications required for continuity of operations. NESDIS provides satellite command and control services on a 24 hour per day, 365 days per year schedule. Two critical components of this initiative are:

Satellite Command and Data Acquisition (CDA) Station Operations: NOAA requests an increase of \$2.2 million to provide funding for the operation of the Satellite (CDA) in Fairbanks, Alaska. In FY2002, NOAA extended the Fairbanks CDA operation contract for six months, at a one-time cost of \$2.8 million, in preparation for recompetition, which will take place in FY2003. In FY2003, the award of the new contract will require twelve full months of funding in order for the Station to operate.

NOAA will use the FY2003 funds to obtain the appropriate technical, management, and administrative contractor support to operate and maintain the acquisition and throughput of data from NOAA and DoD polar-orbiting satellites to the NOAA Satellite Operations Control Center in Suitland, Maryland and National Weather Centers.

The Fairbanks station tracks and acquires data from NOAA Polar-orbiting Operational Environmental Satellites and the Defense Meteorological Satellites. Loss of polar satellite information would impact the National Weather Service, which relies on satellite data for forecast models; and the military, which relies on critical imagery and other satellite information to determine environmental conditions in areas where military operations are occurring.

Homeland Security - Protecting Critical Satellite Control Facilities: NOAA requests an increase of \$0.3 million to enhance security. At these stations, reducing the risk to satellite and ground systems assets due to breaches in security. These satellite stations represent the backbone of the ground systems that support NOAA spacecraft programs - commanding, controlling, and acquiring data from on orbit satellites with an estimated value of several billion.

NOAA will use the requested funds to upgrade and expand security lighting along the access road and around buildings, antennas, and along exterior cableways. NOAA will also convert to energy efficient light heads, install time-of-day, prevailing light level, and motion activated controls to minimize energy use and maximize utility.

Product Processing and Distribution:

\$27.7 million

NOAA requests a program increase of \$6.7 million above the FY 2002 enacted level for a total request of \$27.7 million. This includes a program increase of \$5.1 million for the Product Processing and Distribution Program to process and analyze data from NOAA, DoD, and other earth-observing satellites; supply data, interpretations, and consulting services to users; and operates, maintains, and serves as the lead U.S. agency for the Search and Rescue mission control center. This includes supplying satellite data that makes up approximately 85 percent of the data used in National Weather Service numerical weather prediction models. NOAA will use the requested funds to support the following two mission critical functions:

<u>Reducing the Risk to Continuity of Critical Operations</u>: NOAA requests an increase of \$3.1 million to reduce the risk of losing the continuity of critical satellite product processing and distribution capabilities. Since the late1980s, satellite products produced or under development to support the NWS and Department of Defense have grown from 40 to 500, and the number of satellites used to create the products has increased from 6 to 18. To meet increasing workload, NOAA will expand on-site maintenance and shift staffing levels to ensure that all critical functions are performed, providing vital and timely information to customers and operations during times of peak workload. NOAA will also

develop and update documentation for all critical systems and operations, review security procedures for all ground processing system components, and initiate improved operating procedures and training. This initiative will increase product processing and distribution capacity to meet the growing demands on NOAA's satellite environmental observing systems.

Improved Support for Weather and Hazards: NOAA requests an increase of \$2.0 million to improve weather and hazards product processing and distribution. These funds will accelerate the deployment of these capabilities into operations and provide for their continued support. As a result, the Nation will realize more of the intended benefits from improvements already made in our environmental satellites.

Currently, NOAA cannot implement 65 percent of new satellite products requested by the NWS and DoD in a timely manner. For example, in 1995, NOAA supported the development and operation of about 100 satellite products. Today, the <u>backlog</u> of products is approximately 325 - more than three times the number of <u>total</u> products supported in 1995. Additional funding will speed the transition of new satellite products, such as precipitation estimates, wind fields, and fire and volcanic ash information from development to operations.

Product Development, Readiness, and Application: \$25.8 million

NOAA requests a total \$25.8 million for the Product Development, Readiness, and Applications Program, an increase of \$2.5 million over the FY 2002 funding level. The funding level for the Product Development, Readiness, and Applications Program represents a program increase of \$1.1 million. The requested funding increases below are partially offset by a program reduction in the Global Winds Demonstration Project of \$2.0 million.

Joint Center for Satellite Data Assimilation: NOAA requests an increase of \$2.6 million over the FY 2002 enacted for the Joint Center for Satellite Data Assimilation for a total of \$3.4 million. The National Weather Service, the NOAA Office of Atmospheric Research, and NASA also provide funding as partners in this coordinated national effort to more fully realize the potential of the vast quantities of new satellite data that are becoming available.

The prime benefit of the Joint Center for Satellite Data Assimilation will be improved weather forecasts and warnings, resulting in reduced losses of life and property. The new data will also improve the accuracy and extend the time range of weather and climate forecasts. NOAA will also realize productivity increases by reducing the average time for operational implementation of data from new satellite technology from two years to one year. With average satellite lifetimes of five years, this represents a 20 percent productivity increase per satellite.

Environmental Algorithm Development for Climate Monitoring & Hazards: NOAA requests \$0.5 million to begin developing a system for operational monitoring of atmospheric events from existing satellite systems and near-future satellite systems to advance the use of this information. NOAA will use the funds to develop advanced algorithms and methods to handle higher resolution data and techniques to maximize the information content of satellite data. NOAA will also develop new leading indicators of long-term trends and climate variability using existing data sets. Specifically, NOAA will prepare indicators from existing data sets of water vapor, clouds, and surface conditions for long-term climate trends and assessments as input to national and international decision-making regarding global climate

variability. Knowing how agents such as CO_2 , methane, aerosols, and ozone affect the environment is important to the study of global climate changes.

Additionally, an emerging new portfolio of satellite products (fires, fire risk, desertification, ENSOrelated drought, insect-borne diseases) are poised to make important contributions to the economic vitality of the Nation and the World. The demand for these types of products is growing and a capability to evaluate external products and develop products from NOAA operational satellites is crucial.

NOAA Data Centers & Information Services: \$60.1 million

NOAA requests a net decrease of \$4.3 million from the FY 2002 enacted for a total request of \$60.1 million for NOAA Data Centers and Information Services. The goal of the NOAA Data Centers & Information Services sub-activity is to provide worldwide environmental data and information products and services in the atmospheric, marine, solid earth, and solar-terrestrial sciences to meet the needs of users in commerce, industry, agriculture, science and engineering, the general public, and Federal, state, and local agencies. Environmental data and information maintained by NOAA are vital to practically every economic sector and are used in making decisions critical to: national defense; industrial productivity; energy development and distribution; world food supplies; public health, safety, and welfare; and development of natural resources. Environmental scientists and observers also have a critical need for a long time-series of historical and recent global data to assess long-term environmental trends, to evaluate the current state of the environment, and to predict future environmental conditions and events.

Within the overall requested funding level of \$60.1 million, NOAA will increase funding for the Archive, Access, and Assessment Program and maintain funding at the FY 2002 level for the Coastal Data Development and the Environmental Data Systems Modernization Programs, respectively. These increases are offset by other program terminations discussed previously.

Archive, Access, and Assessment:

\$43.3 million

NOAA requests a decrease of \$1.3 million from the FY 2002 enacted for a total request of \$43.3 million for Archive, Access, and Assessment. This investment will increase the Data Center's capacity to ingest, process, and archive data as well as continue the rescue of valuable environmental data. Requirements have expanded due to growing customer demands for data and products, and increased data management as the volume of new data continues to grow. Within the \$43.3 million of funding, NOAA will start new programs of \$5.4 million as follows.

<u>Regional Climate Services & Assessments</u>: NOAA requests \$1.7 million to develop an improved climate data and information delivery service that will be nationally coordinated, but regionally distributed, eventually building toward services delivered nationally, regionally, and locally through state programs. The requested funding will allow NOAA to improve national, regional and state linkages and make national, regional, state, and local weather and climate observing systems and databases accessible in a timely manner. This will reduce climate risk by leveraging opportunities afforded by better-coordinated climate services provided to the more than three million users of climate data each year.

<u>Next Generation Environmental Information</u>: NOAA requests \$1.6 million to develop a new generation of World Wide Web accessible climate information and statistics for primary use by the energy sector of our economy. This initiative will improve NOAA's capability to provide more detailed, critical information on the state of the climate to policy and decision makers and to operational business planners, resulting in significant savings to the energy industry and many other sectors of the economy and improved economic competitiveness for the Nation.

This funding will allow NOAA to overhaul the current methods and procedures for computing climate information such as heating and cooling degree days, heat indices, wind chills, freezing degree days, and other related statistics with the goal of making this information more appropriate and timely for business decision-making and planning purposes. The energy sector uses this type of NOAA climate information to prospectively determine energy needs and to set baselines for risk management. The Financial Weather Risk Industry also uses these data to settle contracts for the efficient distribution of risk in an industry estimated at \$12 billion annually.

World Ocean Database: NOAA requests an increase of \$1.3 million to update the World Ocean Database to include new sources of data and to put in place the analytical and data management infrastructure needed to transition this activity from the current research mode to a sustained, operational service mode. Recognized international and national programs have identified the ocean as having a critical role in climate change and variability, with subsequent impacts on the national economy. This effort addresses the need to provide for the systematic maintenance and needed updates to the database to include emerging international sources of new data. The requested funding will ensure that NOAA can fully provide an authoritative source of unbiased data useful for evaluating and supporting national policy issues relating to climate change.

Extending America's Climate Record - Paleoclimatology: NOAA requests \$0.5 million for the NOAA Paleoclimatology Program. NOAA will use the requested funding to gather key paleoclimatic records to reconstruct climate records during pre-instrumental periods and produce blended data sets that integrate instrumental, historical, and paleoclimatic data into a holistic climate record. These products are essential for understanding climate variability on decadal to centennial time scales. This funding will help NOAA fill critical knowledge gaps needed for separating climate change due to human activities from natural variability. Additionally, this effort will extend the short-term instrumental record of decadal and century scale variability required by the National Center for Environmental Prediction to produce accurate and improved climate predictions.

Solar X-ray Imager Archive: NOAA requests \$0.3 million to establish a long-term Solar X-ray Imager (SXI) Archive. This initiative will address the need to mitigate space weather events, which cause estimated business losses of \$1 billion per year. NOAA will use the SXI Archive to derive new products to help reduce the effects of extreme space weather events on telecommunications satellites, on electrical power services, and on health risks to astronauts. Dat and products are used by commercial space weather vendors, the space industry, and research scientist and engineers.

Procurement Acquisition and Construction Account (PAC)

NOAA requests \$612.8 million in FY 2003 for PAC activities. The major functional areas within the NESDIS FY 2003 PAC budget request include:

- Satellite Observing Systems
- EOS Data Archive and Access System
- Homeland Security Eliminating Critical Single Points of Failure
- Coastal Remote Sensing
- Construction

Each of these programs is described in more detail below.

Satellite Observing Systems:

NOAA requests an increase of \$29.2 million over the FY 2002 Enacted level for a total of \$587.6 million. This funding provides for the multi-year procurement of spacecraft, launches, and associated ground system changes for the current series of Polar-orbiting Operational Satellites (POES) - NOAA K-N', the National Polar Orbiting Operational Environmental Satellite System (NPOESS), and the Geostationary Operational Environmental Satellite (GOES) Program.

Geostationary Systems:

NOAA requests a decrease of \$35.1 million from the FY 2002 enacted level for a total request of \$227.4 million to support continued post launch requirements for GOES I-M; the continued procurement of the GOES-N series satellites, instruments, ground systems, and systems support necessary to maintain continuity of Geostationary operations; and planning and development for the GOES-R series of satellites and instruments. This net decrease is the result of the following proposed program changes:

GOES I-M: NOAA requests a decrease of \$8.0 million for a total request of \$4.1 million in FY 2003. As a result of the successful launches of GOES L in May 2000 and GOES M in July 2001, these funds are required to continue post launch technical and engineering support to identify and correct on-orbit anomalies. This will ensure that the GOES I-M Series of satellites continues to perform at the high level of reliability and accuracy required of these national assets.

\$227.4 million

\$587.6 million

<u>GOES N-Series</u>: NOAA requests a decrease of \$41.7 million for a total of \$208.7 million in FY 2003 to continue the production of the GOES N-Series of satellites. In FY2003, NOAA will use these funds to continue funding the firm fixed price contract for the GOES N, O, and P satellites and services, but not yet exercising the option for the fourth (Q) satellite. This change results from a recently completed intensive GOES satellite program review, described in detail below.

<u>GOES R-Series</u>: NOAA requests an increase of \$14.6 million for a total request of \$14.6 million for FY 2003. This revised funding requirement is based on a recently completed intensive GOES satellite program review, the details of which follow.

GOES Program Review: Several assumptions underlying the FY 2002 budget request did not become reality during the past fiscal year. The most important was the successful launch of the last GOES I series satellite in July. Based on historical precedent, NOAA had built its GOES N and GOES R series acquisition strategies based on projected failure of this satellite, either at launch, or in orbit. In addition, the GOES 8 satellite continues to provide good service long beyond its projected life. As a result, NOAA possesses a healthy constellation of GOES satellites that now require a revised funding strategy. In order to determine how best to take advantage of this situation, NOAA initiated an intensive review of the GOES program, resulting in significant changes to both "N" and "R" series satellites.

For the first major change, NOAA is no longer planning to exercise the final spacecraft option in the "N" series (GOES Q), and instead will follow P with the first satellite of the next generation GOES "R" Series satellites. This strategy is advantageous for three reasons. First, it allows NOAA to hold GOES Q in reserve in the event the GOES "R" series suffers unexpected development problems. If the GOES "R" series is delayed due to development problems, NOAA is able (until 2005) to exercise the Q option as a stopgap measure.

The second advantage of this strategy is that NOAA can use the already procured fourth set of GOES "N" series International Telephone and Telegraph (ITT) instruments as a risk and cost reduction measure in the event of a launch or early orbit failure of either GOES N, O, or P. In the event of such a failure, Boeing is contractually required to give NOAA a replacement spacecraft and launch. NOAA does not have a similar agreement with ITT, the provider of the instruments. Therefore, NOAA will make the fourth set off ITT instruments available for the replacement spacecraft that Boeing would provide in the event of a GOES N, O, or P failure. The risk and cost savings result from not having to initiate a new contract to procure an additional set of ITT instruments. Finally, from a value perspective, waiting until the next generation R-Series to launch the new GOES imager saves costs associated with modifying the GOES Q spacecraft to fly the new instrument.

In addition to the changes described above, the continued success of the GOES I-Series has allowed NOAA to move the launch readiness date for the GOES R-Series from April 2010 to April 2012, with an acceptable risk of maintaining a two-satellite constellation.

The following five critical elements were the principal factors assessed during the review of GOES R-Series delivery schedule.

1. <u>Satellite Continuity.</u> A critical requirement for the GOES program is to provide continuous coverage over the continental United States. That drives a two-satellite constellation – GOES East and GOES West. A key factor in determining when to deliver satellites is the need to ensure continuity of this service based on the projected operational lifetimes of the satellites currently in operation, in storage (ground and/or on-orbit), or already procured or planned to be procured. The projected operational lifetime of a satellite is based on its design life and predicted reliability.

2. <u>Launch/Early Orbit (L/EO) Failure Mitigation</u>. A satellite is subject to failure to attain orbit or to achieve initial operating condition on-orbit. Satellite procurement schedules must include consideration of these types of failures. Although the risk of these types of failures remains relatively consistent from satellite to satellite (i.e., the individual probability of failure for each satellite is essentially constant), as time passes the cumulative risk of future failures increases.

3. <u>Unpredicted, Premature Failure Mitigation</u>. In addition to predictable failures associated with the satellite design and the possibility of L/EO complications, unpredicted and premature failures must be considered. Some examples of these types of failures include previously undetected design/build/test flaws, unpredicted wear-out failures, commanding errors, and collision/debris damage. These types of failures can be mitigated by either rapid launch on failure response or on-orbit storage. On-orbit storage has been adopted for the GOES program because these satellites are launched via scheduled commercial vehicles.</u>

4. <u>Production/Launch/On-Orbiting Testing Constraints</u>. The cost of integrating and testing satellites, caused by the high cost of engineering teams and facilities, limits the ability to deliver more than one satellite at a time. For example, if two satellites are needed within three months of each other to maintain continuity of service, production of the first must be accelerated to meet realistic production and launch schedules. In addition, the time to checkout a satellite and declare it operational must also be considered. This checkout period usually takes three months. However, for new satellites, this takes much longer – six months for certain individual capabilities and a year or more for the complete set of products and services.</u>

5. <u>Fuel Reserves/On-orbit Storage Issues</u>. While the storage mode for GOES is benign and has a limited negative impact on satellite life, fuel reserves must be considered. Even during storage, a satellite's on-orbit fuel reserve is consumed to maintain station keeping. Launching a satellite too early can cause fuel limitations to be a significant life-limiting factor.

Consideration of all of these factors led to the nominal projection of when to launch, store and operate the satellites. A statistical analysis was then performed to assess the risk of providing continuity of service to the GOES national customers. The analysis showed projected system availability ranges from nearly 100 percent to approximately 70 percent by the time GOES R has completed the checkout phase, which is estimated as six months after a projected April 2012 launch. This means that there is a 30 percent chance or risk that there will be less than two fully functioning GOES satellites by December 2012.

NOAA feels that this risk is acceptable since shortening the GOES R checkout time from six to three months will bring the availability in line with the rest of the satellites. Given that NOAA has ten years to improve upon this checkout time, NOAA believes this is a reasonable risk at this time. However, it must also be noted that even relatively short delays of three to six months may negatively impact system availability.

Polar Orbiting Systems:

NOAA Polar K-N':

NOAA requests \$122.9 million for the NOAA Polar K-N', a decrease of \$15.6 million from the FY 2002 Enacted level to fund the continuation of the production and launch of this series of satellites. NOAA will use these funds to continue the procurement of the NOAA M through N' satellites, instruments, launch services, and ground systems. This request also provides funding for upgrading and replacing aging and deteriorating ground systems to allow for the continuation of operations for the Polar K-N' series through the end of its lifetime.

NPOESS:

NOAA requests an increase of \$79.9 million for a total request of \$237.3 million for the continuation of the tri-agency NPOESS program that will replace the NOAA POES program after completion of the current NOAA K-N' series of satellites. The NOAA request represents the NOAA share of the converged NOAA/DoD/NASA program. In FY 2003, funds will be required to continue the development and production of the NPOESS instruments, including the Visible Infrared Image Radiometer, the Conical Microwave Imager Sounder, the Cross-track Infrared Sounder, the Ozone, Mapping and Profiler Suite, the Global Positioning System Occultation Sensor, and the Space Environmental Sensing Suite. The continued development of these instruments is critical for their timely and cost effective delivery to replace both the DMSP and the NOAA POES spacecraft when needed.

FY 2003 funds are also required to fund the first full year of the spacecraft Engineering and Manufacturing Development phase of the NPOESS program, including total system architecture trades and design of the four major NPOESS segments; Space; Interfaced Data Processor; Command, Control, and Communications; and Launch Support. Funding will also support site surveys, environmental mitigation studies, and initiating construction of antenna systems at high latitude mission recovery sites to support data acquisition functions for the NPOESS Preparatory Project (NPP). The NPP ground system must be in place to support the FY 2005 launch of the NPP spacecraft, which is a major element of the risk reduction necessary for the successful initiation of the operational use of NPOESS, with the first NPOESS satellite available for launch in FY 2008 when the last of the POES satellites is launched.

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\$360.2 million

\$122.9 million

\$237.3 million

EOS Data Archive and Access System Enhancement: \$3.0 million

NOAA requests a total of \$3.0 million to ensure that NOAA possesses the ability to fully exploit the vast amounts of new satellite-based environmental data becoming available, process and distribute that data in a variety of formats, provide stewardship for the data, and make the data accessible to users in a variety of economic, research, government, and public sectors. The expected large increases in data rates and volumes over the next several years from the EOS data alone will far exceed the capacity and capabilities of the NOAA National Data Centers. NOAA will use the requested funds to procure additional media storage hardware and telecommunications equipment that NOAA requires to store the environmental data generated by the 100-times increase in data volume per satellite that will begin in the near future. Without this additional capacity, NOAA will be unable to preserve this NASA EOS data per NOAA's long-term management agreement with NASA.

Homeland Security-Critical Single Point of Failure: \$2.8 million

NOAA requests a total of \$2.8 million to provide backup capability for all critical satellite products and services. This effort supports the continuity of critical operational satellite products and services during a catastrophic outage. Standard information technology and business principles dictate that in the case of a catastrophic failure, a contingency plan for continuing services should exist. In FY 2003, NOAA will begin the first phase of hardware, software, and telecommunications purchases; and perform initial testing of all capabilities for this backup system. The requested funding also supports installing additional communication links to connect the backup location to the NOAA Science Center.

The NOAA Satellite Operations and Control Center is a critical single point of failure for every operational NOAA satellite product and service that the National Weather Service (NWS) and other users rely on for critical weather information. Critical polar-orbiting satellite products and services include POES products such as ozone, temperature, and moisture sounder products; and non-NOAA satellite products from NASA, the DoD, Europe, and Japan. The NOAA Satellite Operations and Control Center is also the single point of entry for all raw satellite data received at the NOAA Science Center, where NOAA generates critical geostationary products and services. These products include all GOES AWIPS remapped imagery, high density winds, precipitation estimates, sounder products, and non-NOAA satellite data from NASA, Europe, Japan, and India. Since satellite data represents about 85 percent of the input to numerical weather prediction models, the loss of this information would be catastrophic.

Coastal Remote Sensing:

\$6.0 million

The goal of the Coastal Remote Sensing project is to foster the development and deployment of technologies to meet long-standing NOAA requirements for observations of coastal zones, hydrological phenomena, and certain atmospheric processes. NOAA requests a total of \$6.0 million to develop and deploy a prototype high-resolution imaging sensor, to meet many of these requirements. In FY 2003, this initiative will allow NOAA to work with NASA to develop conceptual design and capabilities of this instrument, which will continuously monitor coastal ocean areas for harmful algae blooms, coral reef deterioration, pollution changes, fisheries management, and navigation. This instrument will provide continuous, high resolution monitoring in unprecedented detail of terrestrial features. Additionally, this initiative will support joint NOAA/NASA scientific research required for the development of real-time

products in support of coastal health and management. The overall outcome of this program will be significant economic benefits to the tourist industry, hotel and motel suppliers, commercial fisheries, and local governments.

The NOAA coastal ocean constituency has many new requirements for environmental data and information services that are not supported by existing agency systems. The Coastal Remote Sensing Program seeks to significantly improve regional satellite-based environmental observations and analyses through opportunistic high-resolution, frequent viewing of environmental events unobtainable from NOAA polar-orbiting, geostationary, or existing non-NOAA satellites.

Construction:

\$13.4 million

The goal of the NESDIS Construction activity is to ensure that the Nation possesses the facilities and infrastructure required to support NOAA civilian environmental satellites in performing daily mission requirements providing real-time weather, environmental data, and information products that are key to the prediction and monitoring of weather, climate, and natural and environmental events.

Continuity of Critical Facilities for Satellite Operations: \$4.6 million

NOAA requests an increase of \$1.0 million over the FY 2002 Enacted level for a total request of \$4.6 million in FY 2003 to continue the Satellite CDA Infrastructure Program. The Satellite CDA Infrastructure Program is critical to ensure the current 99.9 percent data availability from NESDIS satellite systems. Improved facilities reduce the risk of outages and service disruptions caused by failure of the supporting buildings, facilities, and infrastructure. This program minimizes the risk of spacecraft loss and data loss and provides NOAA with the capability, redundancy, and robustness within its satellite command and data acquisition system infrastructure to continue supporting worldwide requirements for critical operational satellite data and services.

NOAA Satellite Operations Facility – Suitland, MD: \$8.9 million

NOAA requests a total of \$8.9 million in FY 2003 to continue this critical infrastructure initiative to replace the NOAA Satellite Operations Facility in Suitland, Maryland. NOAA requires the FY2003 funding to purchase long-lead items related to the occupancy and use of the new building and to sustain the continuity of critical National satellite operations during the relocation of NOAA activities. These costs include designing new ground systems processing cables to transmit telemetry, command, and instrument data; procuring a minimum number of remote terminals and servers to allow for relocation ; designing, procuring, and installing telecommunications systems; and programming, designing, and configuring satellite systems furniture.

The new NOAA Satellite Operations Facility will be fully capable of meeting NOAA critical infrastructure high technology requirements, which use more than \$50 million in advanced equipment to operate several billion in satellite assets. The facility will allow for 24 hours per day, 365 days per year capability and will possess the necessary redundant electrical, mechanical, and plumbing systems required to eliminate the existing risk of mission disruption and failure and the risks to employee health and safety.



Program Support

Total Request: \$328,431,000

ORF:	\$213,196,000	
PAC:	\$ 78,580,000	
Retirement:	\$ 36,655,000	

Program Support is comprised of three distinct subactivities: 1) Corporate Services; 2) Facilities; and 3) Office of Marine and Aviation Operations (OMAO).

The Corporate Services subactivity covers NOAA's Under Secretary and Associate Offices and its Policy Formulation and Direction functions. The Under Secretary and Associate Offices budget line item funds centralized, executive management policy and direction, and the Policy Formulation and Direction budget line item funds activities such as financial, procurement, and human resource services. The Educational Partnership Program with Minority Serving Institutions (EPPMSI) also is located within the Policy Formulation and Direction budget.

The Facilities subactivity provides funding to address facility compliance issues NOAA-wide. NOAA is working hard to eliminate its backlog of compliance and safety issues so that regular maintenance and periodic life-cycle replacement of major building systems and components would become the standard at NOAA.

¹ These costs are for the retired pay of NOAA Corps officers.

Finally, the OMAO subactivity provides support to NOAA programs through the operation of NOAA ships and aircraft, as well as by outsourcing these activities. This subactivity also funds ship maintenance and repair and construction.

Overall, NOAA requests a total of \$328.4 million for Program Support, a net increase of \$69.3 million above the FY 2002 Enacted level. This continued investment includes a total of \$213.2 million for Operations, Research, and Facilities (ORF), \$78.6 million for Procurement, Acquisition, and Construction (PAC), and \$36.7 million for Retirement Pay for NOAA commissioned officers.

Corporate Services

\$96.0 million

ORF: \$79,837,000 PAC: \$16,121,000

NOAA requests \$96.0 million for Corporate Services, a net increase of \$7.0 million above the FY 2002 Enacted level. This includes a total of \$79.8 million for ORF and \$16.1 million for PAC. Fundamental to NOAA's mission success is clarity of corporate vision, effectiveness of functional direction, and efficiency of operational support. The ORF amount includes funds for the Under Secretary and Associate Offices, Policy Formulation and Direction, and the Educational Partnership Program with Minority Serving Institutions.

- Under Secretary and Associate Offices The Under Secretary and Associate Offices line item includes resources to provide centralized executive management policy and direction concerning: NOAA policy and planning objectives; statutory, budget resources, and other legal requirements; congressional relations; public and educational affairs; and strategic planning.
- **Policy Formulation and Direction** The Policy Formulation and Direction line item includes resources to: develop and implement policy and planning objectives; support development and acquisition of major NOAA modernization systems; provide individual program operations; promote corporate budget priorities and financial management; provide timely, high quality, and cost-effective administrative support to NOAA and the Department of Commerce field programs; and ensure compliance with laws, regulations and guidelines.
- **Business Management Fund** Legislation is proposed in the FY 2003 budget process to establish the Business Management Fund (BMF). This fund will allow NOAA to more distinctly apply accepted business practices to its corporate cost processes, thereby providing for a more accurate distribution of these service costs to programs. Creating this fund will allow NOAA to have increased clarity in its budgetary reporting as well as

enhance accountability among service providers. The BMF will promote NOAA's "truth-in-budgeting" goal by adding rigor to its corporate process and handling centralized charges through an appropriate budgetary mechanism.

Key to this effort is the wholesale Activity-Based Costing (ABC) review that is currently underway. ABC studies will be completed for OFA's main business lines in order to compute costs for general support and service activities now provided to NOAA by OFA's administrative offices. The results of the ABC studies will enable NOAA to charge for services on an activity or "usage" basis and will eventually allow for corporate costs to be responsive to customer demand.

Educational Partnership Program with Minority Serving Institutions - The
Educational Partnership Program with Minority Serving Institutions is one part of a
larger Department of Commerce Center of Excellence Initiative. Minorities are under represented among the nation's professional scientists and among NOAA's scientific
personnel. This program will increase the number of students that graduate and receive
training in the natural and physical sciences through the four Collaborative Science
Centers that NOAA has established at four universities–City College of the City
University of New York, Florida A&M University, Howard University, and University of
Maryland–Eastern Shore.

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- The funds will provide financial support for graduate study, an Environmental Entrepreneurship Program, and a student fellowship program targeted for third-year undergraduates. NOAA will also provide internship opportunities for these students. By targeting students at minority-serving institutions (MSIs), this initiative will provide NOAA and the MSIs with the means of strengthening their educational outreach to minority communities and populations and providing opportunities for employment in the sciences at NOAA.
 - The \$15,000,000 EPPMSI initiative is one part of a larger Department of Commerce Center of Excellence Initiative. Minorities are under represented among the nation's professional scientists, and among NOAA's scientific personnel. This program will increase the number of minorities that graduate and receive training in the natural and physical sciences through a Collaborative Science Center that NOAA has established at four universities, centered around distinguished faculties with expertise in these scientific disciplines.

Significant Adjustments to Base

NOAA requests a net increase of \$0.5 million to fund adjustments to base for Corporate Services' activities. This net increase includes a \$0.4 million increase for the Under Secretary and Associate Offices and a decrease of \$0.3 million in Policy Formulation and Direction. The decrease in ATBs for Policy Formulation is due largely to savings in building rent. The increase will fund the estimated FY 2003 Federal pay raise of 2.6 percent and annualize the FY 2002 pay raise of 4.6 percent. The increase will also provide mandatory inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration (GSA). Also included in this request is \$0.1 million which supports the Administration's proposal to fund all of the Civil Service Retirement System payments out of agency budgets. The request also includes the Office of Federally Coordinated Meteorology (OFCM) base funding, as approved in the FY 2002 budget restructuring.

Detailed Program Changes by Sub-Activity

Operations, Research, and Facilities (ORF)

Under Secretary and Associate Offices

The total request of \$25.8 million for the Under Secretary and Associate Offices represents an increase of \$4.0 million above the FY 2002 Enacted level. This increase will enable the Executive Offices to maintain the level of funding necessary to continue to provide executive management direction concerning NOAA policy and planning objectives; statutory and other legal requirements; congressional relations; and public and constituent affairs. As part of the FY 2002 restructured budget, NOAA established budgetary limits by office and proposed two fundamental changes. One was to fully appropriate the Under Secretary and Associate Offices so that these budgets are not augmented by corporate costs. This will ensure clarity and continuity in the Under Secretary and Associate Offices of Federally Coordinated Meteorology (OFCM) was incorporated in these spending plans for a total of \$1.1 million. Both of these structural changes were funded by realigning appropriations from Policy Formulation and Direction and the National Weather Service (NWS) in FY 2002. The reductions were adopted but the corresponding increases were not. The remaining \$0.8 million is requested to fund normal adjustments to base and support the CSRS legislative proposal. This increase requests restoration of this FY 2002 reduction.

Policy Formulation and Direction

The total request of \$54.0 million for Policy Formulation and Direction represents an increase of \$4.0 million above the FY 2002 Enacted level. This investment supports two key areas: Educational Partnership with Minority Serving Institutions (EPPMSI) funding at last year's enacted level and an enhancement for information technology security.

\$54.0 million

\$25.8 million

NOAA requests 8 FTEs and \$4.0 million for a comprehensive, enterprise-wide approach to information technology (IT) security. This investment will enable NOAA to undertake a balanced approach of better planning, increased support, integrated NOAA-wide training, as well as technical solutions in hardware and software. This is to ensure that core IT Security Program functions (such as: an incident response capability; intrusion detection system expansion; network level firewalls and VPNs; security awareness, training, and education; and security program staffing and management) are implemented on a NOAA-wide basis. This initiative will focus on both providing direct and immediate protection and developing the foundation technology needed so that NOAA can continuously improve service delivery through electronic commerce. While all IT programs require IT security to be built-in, many measures are only effective if done NOAA-wide, and many measures can be implemented once NOAA-wide, thereby saving the programs the costs and resources of duplicating the functions repeatedly.

Procurement, Acquisition, and Construction (PAC)

CAMS

\$16.1 million

The PAC request of \$16.1 million for the Commerce Administrative Management System (CAMS) represents a decrease of \$1.0 million below the FY 2002 Enacted level. This continued investment will allow for the full implementation of CAMS in NOAA. The decrease from FY 2002 mainly represents a change in the level of development work that will be required in FY 2003, specifically savings in contractor support and IT purchases.

With CAMS in the final stages of completion, adequate funding will ensure that CAMS is deployed in a timely manner, allowing all modules to progress toward completion. Once fully deployed, CAMS will contribute in significant ways to maintaining a clean NOAA audit through systematic controls rather than through labor-intensive manual efforts. It will provide managers with on-line, real-time, and accurate financial information and will enable NOAA and DOC to meet statutory obligations under the Federal Managers' Financial Integrity Act (FMFIA) and the Chief Financial Officers Act (CFO Act).



Silver Spring, MD. GSA-leased/ NOAA-managed by Facilities Office.



Santa Cruz, California. NOAA laboratory constructed under Facilities Office's oversight.

Facilities

Total Request: \$24,587,000

ORF: \$24,587,000

NOAA's strategic mission and activities require state-of-the-art facilities and high technology capabilities located nationwide. NOAA has a facility inventory of assets valued in the tens of millions of dollars, with physical properties in every state and territory, and inclusive of specialized laboratories, large and small concentrations of office and storage space, and remote observations. NOAA headquarters and its field installations are major national assets, and they are fundamental to the accomplishment of NOAA's mission. NOAA must provide safe facilities that comply with state and local regulations; that are in good repair and run efficiently; and that are in locations that support and enhance agency missions. The integral relationship between the physical infrastructure of the facilities we occupy and the research and operations conducted in those facilities contributes directly to the attainment of the seven goals of NOAA's strategic plan, and NOAA's mission to support the nation's economic growth in an environmentally sound manner.

Facilities' responsibility is to plan, acquire, maintain, and support NOAA's facilities so that NOAA may continue to successfully fulfill its missions. The facilities program encompasses land and facility acquisition and construction; repairs, modifications, and additions to NOAA-operated facilities; environmental compliance; facilities maintenance; and ensuring a high standard of employee health and safety.

Significant Adjustments to Base

NOAA requests an increase of \$0.9 million to fund adjustments to base for Facilities' activities. The increase will fund the estimated FY 2003 Federal pay raise of 2.6 percent and annualize the FY 2002 pay raise of 4.6 percent. The increase will also provide mandatory inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration (GSA). Also included in this amount is \$0.5 million which supports the Administration's proposal to fund all of the Civil Service Retirement System payments out of agency budgets. In addition, \$3.4 million for Columbia River Facilities has been moved to National Marine Fisheries Service.

Detailed Program Increases by Sub-Activity

Operations, Research and Facilities (ORF)

NOAA Facilities Maintenance, Repairs and Safety

\$6.8 million

The total request of \$6.8 million for Facilities Maintenance, Repairs and Safety (FMRS) activities represents an increase of \$3.6 million above the FY 2002 Enacted level. This continued investment will allow Facilities to pursue the elimination of numerous health and safety issues related to the poor condition of NOAA's facilities. These funds will address NOAA's current backlog of projects in FMRS and will begin the establishment of a focused NOAA safety program. FMRS provides for major repairs, renovations and alterations to NOAA facilities. FMRS' purpose is to identify and correct deficiencies in those facilities, to include needed major and minor repairs, renovations and alterations, and provide limited construction of "like" replacement space.

The NOAA Maintenance, Repairs, and Safety program vision is to provide to NOAA units a national network of facilities that are safe and healthful, in compliance with all existing Federal, state and local laws and regulations, efficient, in proper repair, in appropriate locations and configurations, and designed to fully support and enhance the completion of agency missions.

In addition, NOAA will be able to initiate an industrial hygiene inspection and abatement program in order to reduce the risk for undetected health hazards. Several facilities will be surveyed and abatement projects will correct deficiencies identified in those inspections.

Western Regional Center Operations & Maintenance \$0.7million

NOAA requests \$702,000 for Western Regional Center Operations and Maintenance. These funds will be used to support operation and maintenance expenses at the Western Regional Center (WRC) in Seattle, Washington. The complex currently is underfunded and falling into a state of disrepair. The WRC budget has been flat-lined for 11 consecutive years. During this period, costs have escalated for the increased needs for maintenance activities due to normal facility aging, unanticipated and unfunded

requirements in environmental and other regulatory areas, and much higher than anticipated increases in energy and other utility costs.

Energy Management

\$0.6 million

NOAA requests \$550,000 for Energy Management. The requested funds will be used to reduce NOAA facility operating costs through actively pursuing energy commodities at competitive prices, identifying and implementing energy-savings opportunities and applying renewable-energy technologies and sustainable designs at NOAA-managed facilities. Many of the equipment retrofits that have been installed as part of the energy management effort have enabled facilities to recover their cost in less than five years.

Pribilof Islands Cleanup

\$10.0 million

The total request of \$10.0 million in ORF for the Pribilof Islands Cleanup represents an increase of \$4.0 million above the FY 2002 Enacted level. This request does not continue a one-year grant of \$2.0 million to the State of Alaska for new landfills. In FY 2003, the \$2.0 million will be directed toward cleanup activities. The investment of \$10.0 million will enable NOAA to continue restoration work on the Pribilof Islands. The environmental cleanup includes treating petroleum-contaminated soils, continuing actions related to the closure of the existing landfill, and remediation at various sites and the NOAA portion of an oil-drum dump site. Under P.L. 104-91 and the "Two-Party Agreement" between NOAA and the State of Alaska, NOAA is responsible for an extensive environmental cleanup on the islands in preparation for transfer of Federal lands on the islands to the local communities. The specified cleanup activities will be undertaken primarily through grants or other agreements with qualified contractors and/or local entities and residents of the Pribilof Islands.



The Citation captured 3-D images that were used in the clean-up efforts after the World Trade Center collapsed on September 11, 2001.

Office of Marine and Aviation Operations

Total Request: \$207,886,000

ORF:	\$ 1	108,772,000
PAC:	\$	62,459,000
Retirement:	\$	36,655,000

The Office of Marine and Aviation Operations (OMAO), using ships and aircraft, collects data required to meet NOAA's mission and provides operational, technical, and management support to NOAA programs through the NOAA Commissioned Corps. OMAO operates and maintains NOAA's fleet of 16 research and survey ships and 13 aircraft and assists with outsourcing for ship and aircraft support. These platforms support the missions of NOAA's five line offices and support all of the seven goals in the strategic plan. OMAO manages the NOAA Diving Program, which provides support to the largest complement of divers of any civilian federal agency.

NOAA's diverse fleet of ships conducts research and gathers data relating to the oceans and the atmosphere. The ships have varied scientific capabilities and range from small coastal craft used for research in estuaries and near-shore areas to deepwater oceanographic ships that provide scientists access to the waters of the world. The ships conduct hydrographic surveys to support nautical charting requirements, oceanic and atmospheric research to determine both short- and long-term global climate changes, fisheries stock and marine mammal assessments, and monitoring of coastal habitats and pollution trends. NOAA ships also provide immediate response capabilities for unpredictable events, such as the search and location of wreckage from EgyptAir Flight 990, John F. Kennedy, Jr.'s aircraft, and TWA Flight 800.



RONALD BROWN departs Pearl Harbor, Hawaii, for Japan. En route, they conducted the ACE Asia experiment to detect natural and man-made aerosol particles in the atmosphere for OAR's Office of Global Programs.

NOA

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fleet of aircraft conduct research and collect data on the atmosphere, environment, and geography. The aircraft collect data throughout the United States and around the world, over open ocean, mountains and coastal wetlands. NOAA aircraft conduct varied missions such as flying into hurricanes and winter storms to determine their intensity and path, air-quality research, aerial photography for shoreline surveys, marine mammal and fish surveys, and snow surveys to determine water measurements for predicting spring floods from snow melt.

The NOAA Commissioned Corps is the nation's seventh and smallest uniformed service. The officers of the NOAA Corps command NOAA's research and survey vessels, fly NOAA's "hurricane hunter" and environmental monitoring aircraft, work on mobile field survey parties, and serve in a variety of technical and management positions throughout the agency. NOAA also meets ship and aircraft support needs with ships and aircraft from other sources, including the private sector and the university fleet. These platform charters help meet NOAA's needs for oceanographic and fisheries research data. NOAA is also currently contracting approximately 50 percent of its hydrographic data collection needs.

OMAO's Operations, Research and Facilities (ORF) request includes funds for operation, maintenance, routine repair and outsourcing of aircraft and ships. OMAO's Procurement, Acquisition, and Construction (PAC) request includes funds for ship construction, ship conversion and rehabilitation and for aircraft instrumentation upgrades.

For FY 2003, NOAA requests a total of \$207.9 million for OMAO, including \$108.8 million in ORF, \$62.5 million in PAC, and \$36.7 million for Retirement Pay. The Retirement Pay amount is for payments required as an entitlement to OMAO retired commissioned officers under 33 U.S.C. 8530, 33 U.S.C. 853 p, and 33 U.S.C. 87-2 and includes a change to accrual funding and amortization of the unfunded liability for current retired officers. This budget will be used to amortize NOAA's unfunded liability to date for officers' retirement pay and health benefits. These funds are transferred directly to the U.S. Coast Guard, which handles the payment of retired NOAA commissioned officers for NOAA.


VINDICATOR, a former US Navy T-AGOS ship, recently transferred to NOAA from the U.S. Coast Guard, arrives at the Marine Operations Center in Norfolk, Virginia.

Significant Adjustments to Base:

NOAA requests a net increase of \$30.1 million to fund adjustments to base for OMAO's activities. The increase of \$1.7 million will fund the estimated FY 2003 Federal pay raise of 2.6 percent and annualize the FY 2002 pay raise of 4.6 percent, as well as provide for mandatory inflationary increases in non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration (GSA). Also included in the request is \$3.0 million which supports the Administration's proposal to fund all of the Civil Service Retirement System payments out of agency budgets. The mandatory retirement payments for NOAA Corps will now be paid from the new NOAA Corps Retirement Fund account. A balance of \$1,000,000 for mandatory healthcare benefits for non-Medicare-eligible retired officers now remains in the ORF account.

This shift is due to an Administrative proposal to finance on an actuarially sound basis liabilities under military retirement and survivor benefit programs for NOAA Corps. The President's Budget includes a \$20 million payment from the General Fund for the unfunded liability amortized over 40 years. An increase of \$5 million is requested in the ORF account for discretionary agency contributions for the accruing cost of NOAA Corps retirement benefits. Payments into the new retirement fund of \$20 million (mandatory general fund payment) and \$5 million (discretionary agency contributions) minus mandatory benefit payments of \$16 million leave a balance of \$9 million in the trust fund to cover future benefit costs.

Consistent with changes enacted in P.L. 107-107, an increase of \$1 million is also requested in the ORF account for discretionary agency contributions for the accruing cost of NOAA Corps health benefits for medicare-eligible beneficiaries. Payments will be made to the Department of Defense Health Care Fund. NOAA will receive a transfer from the DoD Health Care Fund to cover mandatory health costs for medicare-eligible beneficiaries (\$1 million in FY 2003).

Detailed Program Increases by Sub-Activity

Operations, Research, and Facilities (ORF)

Marine Operations and Maintenance

\$86.0 million

The total request of \$86.0 million for Marine Operations and Maintenance for data acquisition and maintenance of NOAA's fleet of ships represents an increase of \$11.0 million above the FY 2002 Enacted level. This increase includes program changes totaling \$8.5 million as listed below. This continued investment will allow OMAO to provide efficient and flexible use of NOAA vessels and outsourcing to support NOAA research. Marine Operations and Maintenance operates a fleet of 16 NOAA vessels capable of safely collecting hydrographic and coastal assessment data, conducting scientific and survey operations that are independent of the fishery industry, and conducting sustained oceanographic and atmospheric data collection in various marine environments. This division also provides funds for outsourcing to meet many data-collection requirements.

The request includes an increase of \$815,000 to recruit and train 15 additional NOAA Corps officers for duty on board NOAA's platforms, while remaining within the Corps' authorized ceiling of 299 officers. Authorizing language allows 264 to 299 officers, and the requested funds will bring the Corps strength to 254. NOAA requires these additional officers for the operation of NOAA ships and aircraft and to fill billets (positions) within NOAA's programs. With some of the NOAA Corps officers serving in shore billets, there is a need for more officers to relieve officers already at sea in order to be competitive with other U.S. uniformed services in the amount of time officers remain on sea duty. Training for these officers is also funded in this increase.

Also included in this request is \$600,000 for operation and maintenance of AGATE PASS (Coastal YTT), an ex-Navy vessel recently acquired and being converted to replace FERREL. The requested funds will allow AGATE PASS to provide additional DAS above the vessel it is replacing. When fully outfitted, the modified vessel will be a multi-purpose vessel capable of supporting diverse coastal research needs.

Also provided in this request is \$4.6 million for operation and maintenance of FAIRWEATHER, which is undergoing refurbishment and will come on line in Spring, 2003. The requested funds will allow NOAA to operate the vessel for 130 days-at-sea (DAS) in FY 2003 and acquire an additional 350 square nautical miles of hydrographic data in Alaska in FY 2003. The collected data will allow for the update of nautical charts in many areas in Alaska.

This request also provides \$2.5 million to outsource with the University National Oceanographic Laboratory System (UNOLS) and other sources for ships in the Pacific to support Fisheries-Oceanographic Coordination Investigations (FOCI), VENTS, and Oregon/Washington Groundfish Habitat, and maintenance of the Tsunami moorings in the Gulf of Alaska and Pacific Ocean.

Aviation Operations

The total request of \$16.8 million for Aviation Operations represents an increase of \$2.1 million above the FY 2002 Enacted level. This increase includes a net program change of \$1.0 million The total investment will allow Aviation Operations to operate NOAA's fleet of 13 aircraft and to provide a Standard Depot Level Maintenance (SDLM) for the Lockheed WP-3D aircraft N42RF. The SDLM is a scheduled, periodic maintenance program required every four years for the WP-3D aircraft as recommended by the manufacturer to maintain airworthiness of the aircraft. Without the SDLM, the aircraft will be grounded, leaving only one P-3 available for hurricane reconnaissance, research, surveillance, West Coast storm research, and air chemistry research, which would negatively impact these activities.

Procurement, Acquisition, and Construction (PAC)

Significant Adjustments to Base:

Terminations

NOAA requests a decrease of \$39.9 million to reflect the completion of various ship refurbishments, repairs, and conversions. The decrease items include: ADVENTUROUS Refurbishment (\$4.2 million); ALBATROSS IV Repairs (\$3.0 million); FAIRWEATHER Refurbishment (\$10.5 million); T-AGOS Conversion (\$6.0 million); GORDON GUNTER Upgrade (\$1.5 million); Naval Surplus Vessel (YTT) Conversion (\$3.5 million); and Hydrographic Equipment Upgrades (\$6.2 million). Also included in this decrease is a Small Waterplane Area Twin Hull Vessel (\$5.0), as preliminary designs and specifications are developed.

Systems Acquisition

G-IV Instrumentation

NOAA requests \$8.4 million to begin upgrading instrumentation aboard the G-IV aircraft. Improvements in NOAA's Gulfstream IV aircraft's remote-sensing systems will enhance NOAA's hurricane-reconnaissance capability. New technology will use remote sensors to develop 3-dimensional profiles of hurricanes from 45,000 feet down to the surface and will provide forecasters with unprecedented real-time information on size and intensity. In addition, radar-composite maps will provide critical rainfall information that is crucial to forecasters and to the emergency-management community for preparedness and evacuations.

\$8.4 million

\$8.4 million

Fleet Replacement

The total request of \$54.1 million for OMAO's fleet replacement represents an increase of \$8.8 million above the FY 2002 Enacted level. This continued investment will provide for the following:

Fisheries Research Vessel #2

The total request of \$50.9 million for NOAA's second Fisheries Research Vessel (FRV2) represents an increase of \$45.5 million above the FY 2002 Enacted Level. This vessel will replace the 39-year old ALBATROSS IV in the North Atlantic. Costs of maintaining the aging ALBATROSS IV for the five years needed to construct the replacement FRV and to allow side-by-side missions for calibration purposes are escalating. Further delays in the startup of construction will jeopardize the continuity of a time-series database required to manage Northeast fisheries. Moreover, replacing the aging fleet is necessary to provide research platforms capable of meeting increasingly sophisticated data requirements for marine resource management.

WHITING MRP

NOAA requests \$3.2 million for repairs on the NOAA ship WHITING. This vessel is a 38-year-old survey vessel operating on the East Coast; it has not had a major rehabilitation. The requested funds will provide major repairs and upgrades to obsolete systems, machinery, and mission electronics. It is anticipated that the repairs will extend the useful life of WHITING by approximately 6-10 years. It will also enhance productivity, recruitment and retention of crew, and safety of operations at sea.

\$54.1 million

\$50.9 million

\$3.2million

Budget by Strategic Plan Element

The NOAA Strategic Plan

An FY 2003 Overview

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, and better protecting lives and property. 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, 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 access to continuous operations observing capabilities from satellites to ships to radars and submersibles.
- 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 describes the goals and objectives that have been established to fulfill its vision. The strategy consists of seven interrelated 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 and robust 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.

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Advance Short-Term Warning and Forecast Services

Total Request: \$1,639,508,000

Vision - NOAA's vision for 2005 is to provide significantly improved short-term warning and forecast products and services that enhance public safety and economic productivity to 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 can be predicted minutes to months in **NWS** advance. NOAA's current ability to predict 48% 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 is committed to improving its observing systems, developing a better understanding of natural processes and enhancing its predictive models and dissemination systems. Implementation Strategy - The objectives of this goal are to:



Participation by Activity

- Sustain modernized weather service operations
- Maintain continuous operational satellite coverage critical for warnings and forecasts
- Strengthen observing and prediction systems
- Improve customer service to the public, emergency managers, the media and private forecasters

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 geomagnetic forecasts will increase efficiencies for satellite operations and communications and for electrical power distribution networks. Advanced modeling techniques and more complete observations will reduce uncertainties in hurricane track prediction, saving millions of dollars. This will improve inland flood prediction and save lives and property. Accurate outlooks of future conditions will provide better information for planning weather sensitive activities over land and ocean. Critical contributions for the Natural Disaster Reduction Initiative will be provided from the research, monitoring and operational program in this NOAA goal.

Improvements associated with the modernized weather services have allowed for huge dividends. A costbenefit analysis by the National Institute of Standards and Technology estimated economic benefits to the Nation to be about eight times greater than the costs involved. The Nation should realize annual benefits approaching \$7 billion from the modernization. It is now time to take full advantage of the modernization.

NOAA's NWS FY 2001 Accomplishments - The Nation continued to benefit from the NWS \$4.5 billion modernization efforts with improved and exemplary weather forecasting and warning services being provided. The following are FY 2001 accomplishments:

- *Earned "Straight A Grades" in Government Management Report Card:* NOAA's NWS earned straight A grades in a government management report card issued by Government Executive Magazine and George Washington University. The Government Executive-George Washington University team conducted a lengthy review of the NWS and six other Federal agencies. The NWS is the first agency evaluated over the past three years to receive straight A-grades.
- *C Provided Exemplary Services in the June Tornadoes*: NOAA provided tornado warnings from 25-34 minutes before the tornados touched down (two or three times faster than the average tornado warning) for residents in Siren, Wisconsin and Benson, Minnesota. This enabled citizens to get out of harms way.
- C *Provided exemplary services during the Puerto Rico Flood:* In May, NOAA provided a three hour lead flash flood warning to Puerto Rico. This enabled citizens to be prepared for moderate to severe flooding in Southwest Puerto Rico.
- *Issued 7-day forecasts:* In FY 2001, NOAA's National Weather Service began providing weather forecasts out to seven days, a two-day extension from the previous five-day forecast.
- C *Expanded Advanced Hydrologic Prediction Systems (AHPS):* NOAA's NWS expanded AHPS within the Upper Mississippi and Ohio River Basins. AHPS products infuse new science to improve flood warnings and enhance the value of NWS flood and river forecast services.

- C Launched Geostationary Operational Environmental Satellite, GOES M: On July 23, GOES-M was launched from Cape Canaveral Air Force Station. This satellite was renamed GOES-12 upon reaching geostationary orbit on August 12. GOES-12 is the fifth of five satellites in the current GOES series and is the first to have an operational solar X-ray imager (SXI). The SXI will allow space weather forecasters to better detect the sun's solar storms. It is also the first satellite in the series with a 13.1 micron channel in the imager for improved cloud height and wind determination.
- *Provided Radar on the Web:* In January 2001, the NWS began providing free access to NEXRAD Doppler radar information with four basic radar views continuously available on the web. Additional radar information is freely available via internet file transfer protocol to high-volume users who help bear the communications costs. They can receive more than two dozen radar products continuously from the entire radar network.
- *Launched Lightning Public Awareness Campaign:* In May, NOAA launched a lightning awareness campaign, "*Lightning Kills, Play it Safe.*" The purpose of this campaign was to elevate awareness of the risk of being struck by lightning. In 2000, 51 people were fatally struck by lightning compared to 37 flood fatalities and 29 tornado fatalities.
- *President Declared National Hurricane Awareness Week:* In order to increase preparedness and safety among residents in the storm-vulnerable East and Gulf coast states, President Bush proclaimed Hurricane Awareness Week, May 20-26. This Nationwide campaign was led by both NOAA and FEMA.
- *Conducted Hurricane Preparedness Tour:* In May, NOAA conducted hurricane preparedness tours at selected coastal weather forecasting offices. Each of the 4 stops drew large crowds with school students, emergency managers, and other Federal, State, and local officials touring the P-3 aircraft. Attendees also received hurricane preparedness briefings from local warning coordination meteorologists.
- *Expanded NOAA Weather Radio (NWR):* More than 90 new NWR sites were installed in FY 2001 raising the total number of stations to nearly 600. The NWS goal is to cover 95% of the population by 2005.
- *Completed installation of backup site for AWIPS Master Ground Station:* This installation in Fairmont, West Virginia will automatically ensure that emergency or backup network control and uplink power is available should any field office experience deteriorating signal strength with legacy master ground station equipment.
- *Celebrated the 25th anniversary of the NOAA P-3, the "Hurricane Hunter aircraft":* After 646 runs into 67 hurricanes, the same P-3 aircraft is still flying for NOAA today,.

- C *Conducted busiest ever snow survey season:* From January through mid-April over 1,300 flight lines were flown in 27 States and Canadian provinces.
- *C* Installed INMARSAT Aero M communication system: This system was installed on one of NOAA's two P-3 aircraft allowing the aircraft to transmit data in real time to meteorologists, enabling them to create forecast models with enhanced severe storm timing and location capabilities.
- *Made Ensemble model forecasts (regional and global) available in real time:* Ensemble model forecasts for both global and regional models are now available in real time to NWS forecasters via the Internet. Ensemble model output is used to provide an estimate of uncertainty of a given forecast.
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Key FY 2003 Activities

- Sustain NWS modernized operations
- Provide an adequate preventative and cyclical facilities maintenance program
- Provide operation and maintenance support for 152 fielded Advanced Weather Interactive Processing Systems (AWIPS)
- Continue AWIPS development activities
- Continue NEXRAD and ASOS planned product improvement initiatives
- Make final lease payment on the Class VIII supercomputer
- Provide critical infrastructure protection for the NWS Telecommunication Gateway, a critical link in the national and international infrastructure that collects and distributes weather data
- Continue the radiosonde replacement program to ensure the collection of critical upper air data
- Continue the procurement, launching, and operation of polar orbiting satellites and the follow-on series of geostationary weather satellites
- Conduct required data assimilation and numerical modeling activities which are vital to the NWS forecast process
- Continue the national implementation of the Advanced Hydrologic Prediction Service (AHPS)
- Perform research to improve the forecast accuracy and lead-time for hurricane tracking and landfall prediction through assessments, analysis of enhanced data sets and simulations
- Support the multi-year procurement of spacecraft, launches and associated ground system changes from the current series NOAA K-N of polar-orbiting satellite System (NPOESS) and the Geostationary Operational Environmental Satellite (GOES)

Key Performance Measures

	1998 act.	1999 act.	2000 act.	2001 act.	2002 est.	2003 est.
Tornado Warnings Lead Time (minutes) Accuracy (percent) False Alarm Rate (percent)	11 66	12 70 73	10 63* 76*	10 67** 73**	11 69** 71**	11 70** 70**
Flash Flood Warnings Lead Time (minutes) Accuracy (percent)	52 85	44 85	43 86	46 86	45 86	46 87
Winter Storm Warnings Lead Time (hours) Accuracy (percent)		11 85	9 85	13 90	13 86	14 88
Hurricane Warnings Lead Time (hours)		19	N/A	N/A	Discon tinued	Discon tinued
Accuracy of Hurricane Track Forecasts (48 hours) Nautical Miles				New	142	138
Aviation Forecasts (Ceiling/Visibility) Accuracy (percent) False Alarm Rate (percent)		19 53	15 53*	18 51**	18 52**	19 52**
Marine Forecasts (Wind/Wave) Accuracy (percent)		50	51	52	53	54
Precipitation Forecasts Accuracy of 3-day Forecast (percent)			16	19	17	19

N/A - represents no landfalling hurricanes in 2000 and 2001. Note that this performance measure is discontinued in FY 2002.

* FY 2000 Actual performance measures modified due to additional verification and quality control procedures in February, 2001.

** FY 2001 and 2002 Performance measures modified based on actual performance in FY 2000.



Implement Seasonal to Interannual Climate Forecast

Total Request: \$156,036,000

Vision - NOAA, working together with academic and multinational partners, will provide forecasts of global climate variability with lead-times of one-year and longer, focusing on the effects of El Niño.

Challenge - The largest predictable interannual climate variations are caused by the El Niño-Southern Oscillation (ENSO) phenomenon in the Pacific Ocean. ENSO causes changes in temperature and precipitation patterns, in ocean circulation, and in storm frequency. These changes have global effects. NOAA issues monthly and seasonal probability outlooks for temperature and rainfall based on the application of ENSO research





and has successfully forecast the 1997-1998 El Niño six months in advance. ENSO-related effects range from severe drought to intense storms. The ability to improve the accuracy and reliability of multi-season forecasts requires the incorporation of the effects of other longer term modes of climate variability such as the North Atlantic Oscillation and the Pacific Decadal Oscillation, into improved models. The impact of global change on short-term climate variability must also be understood. This requires better understanding of climate process and can only be achieved with an enhanced global observing system. NOAA must develop an expanded suite of operational products which predict changes on one week to multi-season time scales.

Implementation Strategy - Key issues for the public and decision makers are: (1) the monitoring, description, and dissemination of current state of climate; (2) understanding of unusual or extreme climate conditions; and (3) predictions of important climate variables on time scales from a few weeks to more than a year.

The objectives of this goal are to:

- implement climate prediction systems 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 for the improvement of model predictions of seasonal to interannual climate variations;
- invest in process and modeling research to improve predictability of temperature and rainfall distributions; and
- assess the human and economic impacts of climate variability and improve public understanding of climate forecasts.

Benefits - We can now predict El Niño events with sufficient accuracy and lead time that savings of hundreds of millions of dollars a year can be realized in the both the National and global economies. Climate services will be as important economically in the 21st Century as weather forecasting is today. Improved climate forecasting will benefit producers and consumers in many sectors by improving decision making. A cost-benefit analysis of one ENSO research effort, the Tropical Ocean Global Atmosphere (TOGA) program, shows return on investment of at least 13% - 26% for U.S. agriculture. Agricultural savings of more than \$300 million annually are estimated to result from further forecast improvements. These forecasts will also improve management of fisheries, water resources, and other sectors and resources sensitive to weather and climate variations.

FY 2001 Accomplishments

The Seasonal to Interannual Climate team made strides in forecasting, outreach, research, and observations. The major FY 2001 accomplishments are described below.

- NWS has taken active steps to facilitate delivery of climate prediction serices to customers through its field offices. Headquarters and the National Centers for Environmental Prediction (NCEP) began a visitors program to promote partnerships between NWS field offices and co-located external organizations. Program collaboration between the Climate Services Division (CSD) and the Climate Prediction Center (CPC) ensures that participants are acquainted with climate prediction methodologies, products, and services available from NWS. Further, detailed planning for resident Cooperative Program for Operational Meteorology Education and Training (COMET) training for field personnel in climate variability has been completed. Work has begun on training to support all competencies field offices need to adequately assist customers with their climate prediction services needs. Resident training sessions are scheduled to begin this fiscal year (FY 2002).
- NWS planned 2 workshops for FY2001, and held the first one. An Excessive Heat Workshop was held in February to develop user requirements for excessive heat products produced by the CPC. Planning for a Weather Risk Management Workshop was completed by NESDIS and NWS in partnership with the Risk Prediction Initiative and the Weather Risk Management Association The purpose was to engage industry participants in a vigorous direct technical exchange with NOAA climate data/forecast providers to develop

weather risk industry requirements for climate data and forecast products. NOAA will also discuss with industry participants ways to advance NOAA surface observing system modernization efforts. [This workshop was successfully held in the first week of FY 2002.]

- A Climate Services Division of NWS/OCWWS was formally established as part of Headquarters reorganization. An embryonic staff began the process of building a full staff and acquiring resources while successfully developing a vision and milestones. The division has been active in customer relations, interagency activities, developing policy, and creating a high-caliber office capable of satisfying the needs of those requiring climate prediction and data services. In addition, NWS Western Region, one of the most sensitive to climate variations, has created and filled a position for a program manager of Climate Services.
- The Climate Observations and Services Program, a cross-NOAA program with staff officers from NWS, OAR, and NESDIS was established. The program was funded, a director was named, and a management board appointed. A brochure highlighting present capabilities and future plans has been designed, published, and widely circulated.
 - NCEP implemented the seasonal forecast model (SFM). This is the first operational SFM run by a major international modeling center. Both ensemble forecasts (out to 7 months) and historical runs for calibration are made once per month and data are distributed to the Office of Operational Services (OOS) servers. In addition, NCEP's Environmental Modeling Center (EMC) developed and ran routinely in test mode a global ocean data assimilation and forecast model in preparation for operational implementation in FY 2002. EMC also began a major regional climate forecast development project under OGP's GEWEX [Global Energy and Water Cycle Experiment] Americas Prediction Project (GAPP), and continued development of NCEP's Land Surface Data Assimilation System (LDAS), which will supply more realistic depictions of soil moisture for initializing climate and weather models.

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- The Flexible Modeling System developed at the Geophysical Fluid Dynamics Laboratory (GFDL) is fully operational and is utilized by all global modeling groups for their routine research and analysis work. A highly successful transition to GFDL's new scalable supercomputer occurred in March 2001. GFDL's FMS-based models were operational upon delivery of the new computer. To date, FMS represents the only successful effort in the United States to establish a software framework and consolidate previously independent atmospheric and oceanic modeling efforts including the Climate Modeling Infrastructure Working Group and the NASA CAN. FMS serves as an example around which a unifying software framework could be built.
- NOAA's Office of Oceanic and Atmospheric Research continued the operation of the ENSO Observing System, which provides critical data for NOAA's operational seasonal forecasts. The TAO/TRITON Array is a primary component of the ENSO Observing Array for observing real-time ocean and atmosphere observations. Enhancement in FY2001 of the array has improved our understanding of the oceanic boundary forcing. High temporal resolution data from the moorings allow computation of the fluxes which couple the atmosphere and ocean.
- NOAA conducted research to assess the nature of the interannual and intraseasonal variability of the global tropopause, and link such fluctuations to variations of the troposphere and lower stratosphere. Aeronomy Laboratory scientists performed a statistical analysis of tropopause properties over a wide range of time scales. This research suggests that variations in the tropical tropopause are tied to tropical convection. These results will lead to improvements in the General Circulation Models used for climate predictions.
- NOAA's Office of Global Programs undertook the organization of a site visit and comprehensive review of the CLIMate Assessment for the Southwest (CLIMAS) project. CLIMAS has endeavored to target scientific research on issues of stakeholder concern, including linkages made with the ranching community, tribes, and disease ecology and water management interests in southeastern Arizona. CLIMAS has made notable progress in the production of innovative, high-quality, and multi-disciplinary research and

databases, integration of social and physical science communities, identification of stakeholder needs as a organizing principle for research, and in creating a shared sense of purpose.

OAR's Climate Diagnostic Center (CDC) implemented experimental two to six week forecasts using a new empirical-dynamical model, compared the skill of this model with that of current NOAA climate forecast models, and made results available in real-time on the World Wide Web. This was done to generate usable weekly forecasts on the extended range (up to six weeks forecast lead), with the secondary goal of producing a model suitable for studies of atmospheric extrapolation variability on longer than weekly time frames. In addition, CDC implemented and evaluated the skill of experimental statistical forecasts which use subseasonal variations in tropical outgoing long-wave radiation to forecast precipitation at a range of 8-14 days over the western United States. Research was conducted in order to improve the skill and utility of week two forecasts, with the secondary goal of bridging the gap between weather and climate prediction.

Key FY 2003 Activities

Future plans include an integrated suite of forecast products to provide regionally specific weather and climate information for time scales ranging from hours to days to weeks to seasons to years. We will enhance short-term warning forecasts and predictions of decadal-to-centennial change by working with other NOAA climate researchers. These forecasts will provide longer lead times for warnings about extreme weather events. We will extend weather and climate predictions to cover periods ranging from one week to several seasons.

Specific FY 2003 activities to include:

- Continue to translate the improved understanding of climate variability resulting from enhanced climate monitoring capabilities into better models.
- Maintain and improve data delivery systems to serve the rapidly increasing demands for new climate services.
- Improve the availability of climate reference data sets that are now widely used by the operational and research climate community.
- Establish and maintain the sustained global observing system necessary for climate research and forecasting as well as the long-term monitoring system necessary for climate change detection and attribution.
- Conduct El Niño Southern Oscillation (ENSO) research.
- Improve access to NOAA climate data holdings for the public and decision makers.

Key Performance Measures

	1998 act.	1999 act.	2000 act.	2001 act.	2002 est.	2003 est.
ENSO Forecasts accuracy (correlation) 1/	.85	.85	.84	.85	.85	.85
U.S. Temperature skill score 2/	23	24	25	20	20	21
Number of new monitoring or forecast products that become operational per year 3/	N/A	N/A	N/A	4	4	4
New climate observations introduced 4/	N/A	N/A	N/A	132	150	150

1/ Accuracy is the correlation of the forecast with actual conditions.

2/ For those areas of the United States where a temperature forecast (i.e., warmer than normal, cooler than normal, normal) is made, this score measures how much better the prediction is than the random chance of being correct. Skill score is based on a scale of -50 to +100. If forecasters match what would be predicted by random chance, the skill score is 0. Anything above 0 shows positive skill in forecasting. Given the difficulty of making advance temperature and precipitation forecasts for specific locations, a skill score of 20 is considered quite good and means the forecast was correct in almost 50 percent of the locations forecasted. Forecasts will likely be better in El Niño years than in non-El Niño years.

3/ New performance measure added for FY 2001. Reflects customer service goal of the SI team.

4/ New performance measures added for FY 2002. Reflects the goal of the SI team to increase the density of global climate observations to improve short-term to longer-term forecasting and assist in research and modeling.



Predict and Assess Decadal to Centennial Climate Change

Total Request: \$149,057,000

Vision - NOAA and its research partners will provide science-based information for improving the predictive understanding and impacts of decadal-to-centennial changes in the global environment, specifically for: long-term climate change and greenhouse warming, ozone layer depletion, and air quality improvement.

Challenge - Our planet is a place of natural and human-induced change. Human activities are now recognized as impacting the global heat balance and climate system, thinning of the stratospheric ozone layer, and atmospheric pollution. While these changes increasingly promise to impact our societal systems and natural environments, they challenge the world scientific community to improve its prediction and assessment capabilities.

Participation by Activity (Appropriations Structure)



Explanatory environmental models must be strengthened through better understanding of the atmospheric and oceanic processes so that we may meet the challenges of understanding and foreseeing climate variability and long-term change in approaching decades. Sound economic and social decisions depend upon assessed scientific information as a touchstone.

Implementation Strategy - The objectives of this goal are:

- to characterize the agents and processes that force decadal to centennial climate change;
- understand 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. Document present and past changes and variations in the climate system, including extreme events, and rapid climate changes, exploiting national and international observing networks, satellites, and paleoclimatic data;
- guide the rehabilitation of the ozone layer by providing the scientific basis for policy choices associate with ozone-depleting compounds and their replacements;
- provide the scientific basis for improved air quality by improving the understanding of high surface ozone episodes in rural areas and by strengthening the monitoring network to detect cleaner air quality and improving the characterization of airborne fine particles; and
- develop models for the prediction of long-term climate change (including extreme events and rapid climate changes), carry out scientific assessments, and provide human and biophysical impacts information.

Benefits - Nations have committed to eliminating production of compounds that deplete the ozone layer. Research is not only helping define "ozone-friendly" replacement compounds and monitoring the atmospheric decline in ozone-depleting substances, but also documenting 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 about the role of human activities in global climate change and variability. NOAA research has identified areas of air quality changes, such as high surface ozone in rural areas, that require the development of a fundamental understanding of their causes. 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 2001 Accomplishments

NOAA has recognized that a sustained, multi dimensional program of research is required to understand and monitor the long-term processes and status of the Earth's atmosphere. Ongoing research involves monitoring and understanding natural and anthropogenic aerosols and greenhouse gases, stratospheric ozone depletion, background atmospheric constituent composition, and reconstructing past climates through the use of historical measurements and paleoclimate data. In FY 2001, NOAA's research continued to document trends in atmospheric trace gases related to climate, air quality, and the ozone layer (e.g., carbon dioxide, halocarbons, nitrous oxide, ozone), especially focusing in FY 2001 on documenting and assessing trends in climate-related gases such as atmospheric carbon dioxide, nitrogen dioxide, and methane. NOAA's FY 2001 research included analysis of trends in climate-related parameters such as the frequency of heavy precipitation events and related runoff. The climate- and ozone-related properties of atmospheric aerosols and clouds were elucidated in studies over ocean and land surfaces, and a new instrument was developed for measuring the absorption of radiation by cloud water. FY 2001 research also contributed to a new international focus on the intercontinental transport and chemical transformation of trace gases related to climate and air quality. In 2001, analysis of data from an air quality study in the Houston area has yielded improved estimates of the emissions of ozone-forming pollutants from refineries, information that will enhance the scientific foundation of that region's efforts to improve air quality. In collaboration with university, government and international partners, NOAA continues to provide the scientific basis for sound, science-based information supporting decisions relevant to issues regarding decadal to centennial change. In FY 2001, NOAA played leading roles in assessing the understanding of two scientific topics: climate/climate change (international and national assessment reports published in Spring 2001) and ozone-layer depletion (assessment report in preparation during 2001/2002). These achievements are realized largely through the efforts of OAR, NESDIS, and NWS.

Key FY 2003 Activities

- Continue to advance understanding of the natural and human-influenced processes affecting the earth's radiation balance with an emphasis on observations of the coupled ocean-atmosphere system, especially as it relates to the cycle of carbon dioxide, utilization of observations, and assessments of the current understanding that serve as input to public policy formulation.
- Continue the development of a climate reference network; NOAA will continue to place instruments that measure temperature, precipitation, and soil moisture at a number of reference network sites and to implement a means to electronically communicate all data collected in the reference network.
- Continue improving the ways observations and models are used to study and predict the effects of climate changes on a regional scale within the US.
- Continue the improvement of observation systems and extend the capability of models to develop the ability to predict the effects of natural climate cycles with time scales longer El Nino Southern Oscillation (ENSO).

- Further the understanding of the role of the ocean in the climate system by continuing the deployment of the ARGO float network, ongoing field measurement programs and special targeted studies, and refinement of remote sensing capabilities to better understand the role of the ocean in the climate system.
- Advance the understanding of the role of natural and human influenced emissions, including aerosols, in altering the radiation balance of the earth by enhancing ongoing monitoring programs and conducting new field measurement programs.
- Continue the ongoing archival and analysis of climate data to assess current and future impacts and to provide critical data and services to other Federal Agencies, state and local government, private commercial groups, and the public.
- Continue monitoring the recovery of the stratospheric ozone layer.

Key Performance Measures

The scientific community has in place a regular process for evaluating, on a several-year time scale, the major scientific advances in climate science. This process is the periodic assessment of the state of scientific understanding of the climate system. NOAA's measure of performance is that 90% of the research in relevant areas of endeavor be incorporated into these assessments, namely, the vast majority of NOAA's results are deemed by our scientific peers to be major advances in understanding. Three to five years is the period generally used to expect substantial overall advancements in a field such that a new state-of-understanding assessment could be justified. Those products take 2 ½ to 3 years to produce.

Performance Measure	1998 act.	1999 act.	2000 act.	2001 est.	2002 est.
Document the "turnover" of CFC source gases in order to verify the effectiveness of global policy action	N/A	1	N/A	N/A	1
Publish updated trend results of air quality measurements	N/A	1	N/A	1	1
Lead development of a peer reviewed initial assessment of regional ozone in North America, including summarizing results for customers	N/A	1	N/A	N/A	1
Results of 90% of the research activities cited in the 2001 IPCC third Assessment of Climate Change	N/A	N/A	N/A	90% cited	N/A
Results of 90% of the research activities cited in the 2002 Scientific Assessment of Stratospheric ozone depletion.	N/A	90% cited	N/A	N/A	90% cited
Results of 90% of the research activities cited in the 2000 US National assessment of the Potential Consequences of Climate Variability and Change	N/A	N/A	N/A	90% cited	N/A



Promote Safe Navigation

Total Request: \$162,112,000

Mission - 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. marine navigation, mapping and surveying and assist commercial shipping in moving increased cargoes safely and efficiently into and out of the Nation's ports and harbors. NOAA will provide a precise satellite derived reference system as the basis for the Nation's nautical data and 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. With 3500 commercial shipping accidents annually, the

Participation by Activity

(Appropriations Structure)



potential for serious injury to lives, property and the environment is compounded by the fact that over half the cargo transported is oil or hazardous material. The total volume of maritime trade will more than double by the year 2020, posing a significant challenge to the aging infrastructure of the U.S. Marine Transportation System (MTS).

NOAA's navigation services are a key component of the MTS, but more than 50 percent of NOAA's nautical charting data were obtained before 1940. One-third of the National Shoreline, for which NOAA is responsible, has yet to be mapped. Two-thirds of the data used for tidal predictions are more than 40 years old, and the physical plant of water level measurement stations is in decline. Finally, the existing coordinate reference system must be modernized to provide the higher accuracy and accessibility available from the Global Positioning System (GPS).

In recent years, dramatic improvements in efficiency and accuracy have been realized in the technology

used to collect data, and NOAA is capitalizing on these technologies and partnerships to address its MTS infrastructure responsibilities.

Implementation Strategy - The objectives of the Promote Safe Navigation goal are to:

- build, maintain, and deliver a digital nautical charting database to underpin new electronic navigation systems which integrate satellite positioning, tidal heights and currents, radar and sonar, and navigational aids;
- update nautical surveys of the Nation's coastal areas using full-bottom coverage technologies;
- define the national shoreline in an accurate and consistent manner using state of the art technology to serve the Nation's navigational and coastal needs;
- provide mariners with real-time observations and forecasts of water levels, tides and currents, and weather conditions in ports; and
- continue to evolve the National Spatial Reference System to anticipate and fulfill the growing demands for more accurate and timely positioning services critical to digital mapping, charting, and surveying.

Benefits - New technology, including full-bottom nautical surveys, digital charting, satellite positioning (GPS) and real-time observations of tides and currents promise to reduce maritime transportation risks, enhance environmental protection and heighten the competitiveness of the U.S. shipping industry. With today's deep-draft container ships, each additional inch of clearance translates into tens of thousands of dollars in additional cargo trade in or out of the United States. Development of real-time environmental and prediction systems will provide important data where users request it. Location, ship dynamics, and precise depth data will alert mariners to potential accidents and will bolster navigational safety and efficiency. In the years ahead, NOAA will continue to streamline its process of collecting and processing data and delivering charts to the maritime community. Particular emphasis will be placed on improving the delivery of electronic formats. By positioning products and processes for the decades ahead, NOAA will continue to ensure that the Nation's maritime commerce remains safe, efficient, competitive, and responsive to customer requirements. NOAA's nautical data will also support the needs of coastal zone planners, regulatory officials and researchers as they work to ensure the safe, sustainable and efficient development of our coastal and ocean resources.

FY 2001 Accomplishments

NOAA's National Ocean Service (NOS) produced 263 new editions of nautical charts and 70 new Electronic Navigational Charts (ENCs). NOAA launched a website offering free ENC downloads to encourage the distribution and use of the product. The critical hydrographic survey backlog was reduced by 6.9%, making 2001 the most productive year since the effort began in 1994. The National Spatial Reference System, which provides the basic positional framework for the Nation's spatial data, was improved with the addition of 31 new Continuously Operating Reference Stations (CORS). 91% of the coterminous United States is now withing 200 km of a National CORS.

As part of the Height Modernization effort, 16 stations in the National CORS network had their

vertical accuracy improved through ties to the North American Vertical Datum 1988 (NAVD 88). Two new Physical Oceanographic Real Time Systems (PORTS) were activated in the ports of Los Angeles/Long Beach, CA and Soo Locks, MI. There are now a total of seven PORTS installations throughout the United States.

In the wake of the terrorist attacks, NOAA conducted GPS surveys to establish an accurate geographic network around the World Trade Center and Pentagon disaster sites to support precise mapping of the areas with high-resolution cameras and laser ranging devices. NOAA also developed 3-D models of the disaster sites to help engineers concentrate their digging and recovery efforts. NOAA assisted the U.S. Coast Guard, Navy, Army Corps of Engineers, port authorities and others with plans and actions to improve port security. New security zones and restricted areas were established and charted around naval bases and port communities in Norfolk and San Diego, and efforts were initiated with other ports to study local and regional port contingency planning.

Key FY 2003 Activities

- Produce 250 new editions of nautical charts and an additional 65 electronic navigational charts for a total of 280 ENCs.
- Map an additional 20% of the shoreline in our Nation's 40 major port areas.
- Reactivate the NOAA Survey Vessel FAIRWEATHER to accelerate the reduction of the critical hydrographic survey backlog.
- Reduce the critical hydrographic survey backlog by an additional 5.9%.
- Integrate NOAA's navigation-related tools through the National Spatial Reference System to deliver more accurate and timely 3-dimensional positioning capability.
- Maintain the operational capacity of the 172 National Water Level Observation Network stations and develop real time capabilities in support of Physical Oceanographic Real-Time Systems (PORTS) for navigation and coastal resource management.
- Implement the comprehensive quality assurance capabilities and modernization necessary to support additional PORTS.

	1998 act.	1999 act.	2000 act.	2001 act.	2002 est.	2003 est.
Nautical chart editions (suite of 1000) Lithographic/Alternative Methods ^A	360	250	226	263	250	250
Electronic Navigational Charts (ENC) cumulative ^B	N/A	37	65	135	215	280
Reduce critical area survey backlog (43,000 SNM backlog) Cumulative reduction (%) ^C	15.5	20.7	24.3	31.2	35.0	40.9
Percentage of NWLON stations fully operational	N/A	N/A	65	60	75	70
National Spatial Reference System (NSRS) Cumulative % complete ^D	69	59	71	75	78	83

Key Performance Measures

A. This Performance Measure replaced the Percentage of Chart Suite Printed. The FY2001 target for 200 charts is to have these charts ready for printing if and when requested.

B. This performance measure replaces the "Cumulative % of Vector Charts Collected" with "ENC Vector Charts Collected, Maintained and Released (cumulative)."

C. A one-time change in accounting caused cumulative reduction in backlog to be adjusted in FY1999 estimates. To improve estimates for contracting, contract miles are now counted when awarded and not when accomplished.

D. The vertical component of the NSRS performance measure was expanded in FY1999 to include additional networks not previously tracked that serve to measure height modernization performance. The target base reference for Continuously Operating Reference Stations increased from 200 to 300 in FY 1999.



Build Sustainable Fisheries

Total Request: \$555,959,000

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

Challenge - Billions of dollars in economic growth, thousands of jobs and countless recreational fishing opportunities are not realized as a result of overfishing and overcapitalization in commercial and recreational fisheries. While many fisheries are well managed and are producing positive benefits, others are severely depleted, and must be restored to realize their long-term potential. Transboundary resources **Participation by Activity** (Appropriations Structure)



can be especially vulnerable as they require international cooperation to achieve effective conservation and management. Bycatch of non-target species, including juveniles and protected marine species, the controversial allocation decisions among elements of fishing industries, and the degradation and loss of essential fish habitat are serious problems effecting U.S. fisheries.

Implementation Strategy - The objectives of this strategic planning goal are to:

- eliminate and prevent overfishing and overcapitalization by assessing the status of fishery resources, advancing fishery predictions, managing for economic growth in the fishing industry and ensuring adequate and voluntary compliance with fishery regulations; and
- attain economic sustainability in fishing communities by providing research and services for fishery-dependent industries and maximizing benefits from marine resources.

Benefits - Rebuilding over exploited fish stocks by eliminating overfishing, protecting and improving fish habitat, and improving the economics of fisheries by reducing overcapitilization, are the key elements in a transition to sustainable fisheries. These activities will result in a more viable and competitive U.S. fishing industry, which in turn will lead to economic and social improvement in fisheries-dependent communities. Along with economic gains and the rebuilding of living marine resources, improved fisheries management and conservation will enhance recreational opportunities and save lives by eliminating the dangerous and wasteful race for the fish.

FY 2001 Accomplishments

NOAA is providing national leadership to restore fisheries. NOAA continues to conduct research to advance fishery predictions, reduce costs of conventional stock assessments, develop advanced remote sensing techniques, improve fishery habitat and promote environmentally sound aquaculture.

In 2001, NOAA Fisheries completed its Strategic Plan for Fisheries Research. This revised fiveyear plan updates the original plan released in 1998 as a requirement of Section 404(a) of the Magnuson-Stevens Fisheries Conservation and Management Act (MSFCMA). New research initiatives on fisheries, habitat, and protected species that address MSFCMA requirements are highlighted.

To address needs and implement the recommendations of the National Research Council, NOAA Fisheries completed the Stock Assessment Improvement Plan (SAIP). This multiyear initiative prescribes three national "Tiers of Excellence" in stock assessment and scientific advice to management. These Tiers enhance stock assessments using existing data, elevates all assessments to nationally acceptable standards, and develops and conducts "next generation" assessment involving ecosystem considerations and environmental and spatial effects.

Recognizing that society is part of the ecosystem, NOAA Fisheries implemented new socioeconomic research to discern the interests, values, and motivation of participants in a fishery and others who use or benefit from the ocean. Such knowledge is critical to effective management decisions and enforcement of regulations. Education and outreach are equally significant activities and NOAA Fisheries has collaborated with local, national, and international partners. In a significant collaboration NOAA is providing information and project management support to the United Nations Atlas of the Oceans. This project is a sophisticated Internet portal containing a wealth of knowledge relevant to the sustainable development of the oceans and serves as the principal gateway to detailed information relevant to policy-makers, resource managers, private and public sector constituents, researchers and students.

Key FY 2003 Activities

- Improve and expand stock assessments and prediction through increased fish stock surveys.
- Implement the NMFS Stock Assessment Improvement Plan (SAIP). This plan represents an investment in science program infrastructure and key staff resources to ensure state-of-the-art assessments for core species, adequate baseline monitoring of all Federally-managed species, and remedial data collection efforts.
- Investigate basin-wide changes in atmospheric and oceanic circulation and their effects on marine populations. FATE's (Fisheries and the Environment) goal is to develop biological and physical indicators of major changes in the ocean climate regime (i.e., regime shifts) that affects fisheries and other ecosystem components.
- Continue implementation of the national fisheries information system. The proposed system would improve the accuracy and effectiveness of existing data collection programs by establishing common data collection, information technology, and quality standards for regional programs, and integrating the results into a unified Web-enabled information system.
- Initiate new economics and statistics activities in cooperation with recreational and commercial fishing participants, state fishery agencies, interstate commissions, fishery management councils, fishing communities, and regional fisheries network.
- Provide increased observer coverage in previously unobserved fisheries or increase coverage to provide improved statistical validity. This program will improve the quality of data and provide a sound basis for management decision while capitalizing on technology enhancements that will decrease costs and improve efficiency.

Key Performance Measures

	1997	1998	1999 act.	2000 act.	2001* est.	2002* est.
By 2005, 25% (86 of 279) fewer over fished fisheries (stocks subject to overfishing)	N/A	N/A	-4%	-7%	N/A	N/A
By 2005, 20% fewer overcapitalized fisheries (economic and social aspect)	N/A	N/A	0	1%	N/A	N/A
By 2005, 60% of stocks have sufficient "essential fish habitat"	N/A	N/A	N/A	10%	N/A	N/A
By 2005, 9% increase in employment in non-capture fishing and/or other sectors	N/A	N/A	0	N/A	N/A	N/A
By 2005, 20% of communities impacted by limited/closed fisheries are economically improved	N/A	N/A	0	1%	N/A	N/A
By 2005, 17% increase in economic contribution of aquaculture to Gross Domestic Product (GDP)	N/A	N/A	0	N/A	N/A	N/A
By 2005, 100% of aquaculture operations are in compliance with code of responsible aquaculture practice	N/A	N/A	0	N/A	N/A	N/A

*All of these measures are being replaced by new measures displayed in the following page.

PERFORMANCE MEASURE*	1998 Actual	1999 Actual	2000 Actual	2001 Est.	2002 Est.	2003 Est.
MAJOR : NMFS will reduce the number of overfished stocks of fish by 2007:						
a) Decrease the number of overfished major stocks for which status is known from a 2000 baseline of 56 overfished stocks out of 167 major stocks.	N/A	N/A	56	56	55	55
b) Decrease the number of overfished minor stocks for which the status is known from a 2000 baseline of 36 overfished stocks out of 78 stocks with known status;	N/A	N/A	36	36	36	36
SUBORDINATE RP: Increase the percentage of rebuilding plans in place for overfished major stocks;#	N/A	N/A	93%	93%	94%	96%
SUBORDINATE RP: Increase the percentage of rebuilding plans in place for overfished minor stocks;#	N/A	N/A	96%	96%	96%	97%
SUBORDINATE EFH: Increase the adequacy of information (%) required to address environmental effects of fishing gear during next round of EFH amendments;	N/A	N/A	40%	45%	60%	75%
SUBORDINATE ECON: By 2007, increase the % of fisheries/fishing communities for which complete social and economic data are collected;	N/A	N/A	N/A	N/A	N/A	20%
SUBORDINATE SAIP: By 2007, NMFS will reduce the number of major stocks with an "unknown" stock status to no more than 98;	N/A	N/A	120	120	120	118

*New Performance Measures

Terms: SAIP= Stock Assessment Improvement Plan; RP= Rebuilding Plan # Incudes all stocks currently known as overfished and those that become known as overfished. For those that become known as overfished, a rebuilding plan will be done within 18 months.

Note: As of 2000, there were 287 major stocks and 618 minor stocks as reported in the NMFS "Status of Fisheries of the United States, Report to Congress."


Recover Protected Species

Total Request: \$319,186,000

Vision - NOAA's vision is to conserve marine species and to recover those in danger of extinction. By 2007, 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 and unknown causes. For example, West Coast salmon 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 marine turtles in the Nation's waters. Several seal and sea lion populations in Alaska are declining rapidly and the causes are uncertain. Recovery plans have been developed for the most endangered species, but implementation for others, especially for stocks of marine mammals and sea turtles, is needed. The desired outcome is to recover protected species in danger of extinction and to maintain healthy species and ecosystems, in a manner compatible with the sustainable use of marine resources.

Implementation Strategy - The objectives of this goal are to:

- reduce the probability of extinction for protected species; and
- maintain healthy species and ecosystems.

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 2001 Accomplishments

A primary objective of the Recover Protected Species (RPS) strategic planning team is to recover species in danger of extinction in a manner compatible with the sustainable use of marine resources. During FY 2001, NOAA Fisheries released a Final Biological Opinion on the Federal Columbia River Power System and successfully concluded the Columbia River Basin-wide Salmon Recovery Strategy among a nine-agency Federal Caucus. This body released a comprehensive long-term strategy to restore threatened and endangered salmon and steelhead. The goal is halt the decline in populations within 5-10 years and establish increasing abundance trends within 25 years.

Under general guidance from Congress, NOAA Fisheries implemented a broad-based Steller Sea Lion Research Initiative in Alaska to understand the causes for the thirty-year decline of the western population. \$43 million was awarded to 150 research projects covering six primary hypotheses for the sea lion decline.

FY 2003 Key Activities

The RPS program proposes to restore and sustain the stream of economic, scientific and environmental benefits from the oceans to the American public, as well as other nations. This will be accomplished by focusing on the conservation and recovery of several key marine and anadromous species that serve as indicators of environmental health as well as supporting key economic activities (fisheries and recreation).

The RPS initiatives focus on both the crisis of several species on the brink of extinction and those that are threatened by various human activities. The initiatives target species across the marine oceanscape both domestically and internationally. This will be done through a combination of research, monitoring and management actions to determine the causes for the

decline and to implement recovery measures.

- Sea Turtle Conservation and Recovery Atlantic and Pacific sea turtles are experiencing serious decline and extinction projections within this century. NOAA will gather the information on the risks these stocks face from fishing operations and other activities, both domestically and internationally, and mitigate those risks as well as monitor trends in species status. These activities are vital to promote marine turtle recovery and avoid restrictions to economic activities that are impacting them.
- **Northern Right Whales** NOAA will expand current population, monitoring and health assessments and recovery efforts in the North Atlantic and in the North Pacific.
- Atlantic Salmon Recovery The Gulf of Maine Atlantic salmon was listed as endangered in 2000. Once ranging from the Housatonic River in Connecticut to the Canadian border, naturally spawning populations are now restricted to fewer than 20 streams in mid-coast and Downeast Maine area. NOAA will conserve and restore healthy populations of Atlantic and the habitats upon which they depend to provide a surplus for recreational and native people's fisheries consistent with existing laws. NOAA will also continue research to mitigate interactions between wild and farmed salmon.
- **Pacific Salmon Recovery** Pacific salmonids, which have long been integral to the culture and economy of the Pacific Northwest, have declined dramatically over the past century due to the combined effects of habitat destruction; hydropower operations; poor land-use, transportation and water-resource decisions; harvest and hatchery impacts; increased predators; and poor environmental conditions. NOAA will implement the Pacific Coastal Salmon Recovery Fund, and provide support to the broad array of state, tribal, local governments and private entities that are involved in collaborative salmon conservation efforts in this vast area.
- **Cooperative Conservation and Recovery With States** These agreements will provide the means for states and local communities to take local initiative in the management and recovery of Endangered Species Act (ESA)-listed and candidate species by providing the legal authority to make the decisions about how best to protect species at risk of extinction.
- Large Whale Recovery NOAA will scientifically determine whether two key endangered whales - humpbacks and bowheads - have recovered and are candidates for delisting. This information will enable NOAA to detect changes in the status of large whales to prevent long-term irreversible damage to these populations.
- Columbia River Biological Opinion Implementation Research, monitoring, and evaluation are necessary to continue the implementation measures of this program and should provide the scientific information necessary to assess achievement of the biological opinion performance measures at the 2003, 2005, and 2008 check-ins.

	1998 act.	1999 act.	2000 act.	2001 est.	2002 est.	2003 est.
By FY 2007, reduce the probability of extinction of 11 endangered species/ESUs out of 29 endangered species/ESUs*	na	na	na	3	6	6
By FY 2007, reduce the probability of extinction of 10 threatened species/ESUs out of 27 threatened species/ESUs	na	na	na	2	2	5
By FY 2007, reduce the probability of extinction of 9 candidate species/ESUs out of 27 candidate species/ESUs	na	na	na	1	2	4
By FY2007 mortality of strategic marine mammal stocks incidental to commercial fishing operations in 14 fisheries will be at insignificant levels (cumulative)	na	na	na	2	6	6

Key Performance Measures

*For purposes of the Endangered Species Act (ESA), a "species" is defined to include "any distinct population segment of any species of vertebrate fish or wildlife which interbreeds when mature." Federal agencies charged with carrying out the provisions of the ESA have struggled for more than a decade to develop a consistent approach for interpreting the term "distinct population segment." A population (or group of populations) will be considered distinct (and hence a species) for purposes of the ESA if it represents an evolutionary significant unit (ESU) of the biological species. A population must satisfy two criteria to be considered an ESU: 1) it must be reproductively isolated from other nonspecific population units and 2) it must represent an important component in the evolutionary legacy of the species.

Note: The RPS budget proposal is based in part on measuring the ability to reduce the probability of extinction for at risk-species. RPS performance will be measured by the results of the attempts to reduce the risk of extinction for protected species from detrimental human activities, e.g., reducing incidental and direct takes, increasing species habitat, decreasing negative interactions, and mitigating natural phenomena.



Sustain Healthy Coasts

Total Request: \$371,851,000

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 - Despite progress in developing technology, information and management tools to protect and sustainably use coastal resources, rapid population growth and increasing demands continue to degrade coastal resources and threaten the economic productivity and environmental services of coastal areas. Although these areas comprise only 10 percent of U.S. land area, over half of the U.S. population lives on or near the coast, and coastal populations are growing faster than most inland areas. There are many signs that additional efforts are needed to protect the economic and environmental values of U.S. **Participation by Activity** (Appropriations by Activity)



oceans and coasts. Polluted runoff and degraded water quality continues to close or restrict the use of nearly 31 percent of U.S. shellfish growing waters, and declines in environmental quality continue to threaten coastal communities, businesses, and human health.

Healthy coastal environments support tourism, recreation, fishing and other industries that generate more than \$100 billion annually in coastal communities across the Nation. Coastal wetlands, estuaries, coral

reefs and other areas provide essential feeding and nursery habitats for approximately 70 percent of all U.S. commercial and recreational fisheries species. Maintaining the health, productivity and biodiversity of coastal ecosystems is challenging, but essential to sustainable development of coastal economies and the future welfare of the Nation.

Implementation Strategy - The goal of Sustain Healthy Coasts encompasses the following objectives:

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

Benefits - The pursuit of this goal provides information, technology, solutions, and other valuable tools to coastal resource managers at local, state, tribal and Federal levels. NOAA's coastal activities form an integrated suite of monitoring, research, assessment, restoration, information dissemination and resource management programs that enable sound decision making and sustainable development of coastal areas. Federal-state partnerships are essential components of the Sustain Healthy Coasts goal. Research provides improved understanding of the way in which coastal ecosystems function, increasing our ability to predict how they respond to changes. The ability to predict change and determine its causes empowers managers and stakeholders to work together to promote sustainable use of coastal resources and mitigate costly damages. NOAA's coastal programs seek to ensure that the Nation's coastal ecosystems are managed for the long-term benefit of the public.

FY 2001 Accomplishments

Maintaining the health, productivity and biodiversity of coastal ecosystems is essential to sustainable coastal economies. It is also critical to the future welfare of the Nation. Through the Sustain Healthy Coasts goal, NOAA addresses the practical needs and concerns of coastal resource managers, provides the science and technology for improving coastal resource management, and helps communities and other partners implement sound and effective ocean and coastal stewardship. These accomplishments are primarily realized through the efforts of the National Ocean Service, the National Marine Fisheries Service, the National Environmental Satellite, Data and Information Service, and the Office of Oceanic and Atmospheric Research. Accomplishments in FY 2001 include:

- NOAA responded to calls for scientific assistance on 135 incidents and spills of toxic materials into the Nation's coastal waters. NOAA's Hazardous Materials and Disaster Response teams provided on-site scientific support to other Federal and state agencies, and NOAA's Damage Assessment and Restoration Program evaluated and screened spills to determine whether to initiate damage assessment activities.
- In FY 2001, NOAA closed three resource damage cases to recover funds to restore natural resources damaged by human activity, providing millions of dollars in restoration funds. Among the cases brought to closure was a decade-long battle with Montrose Chemical Corporation and two other companies for damage linked to a large deposit of DDT offshore of Los Angeles.

Over 100 tons of DDT covering about 17 square miles of sediment on the ocean floor contaminated both fish and seabirds, resulting in a commercial fishing ban, and a crash in the bird population. The defendants will pay \$73 million for cleanup and restoration activities.

- NOAA and the Environmental Protection Agency fully approved five state coastal nonpoint pollution programs in FY 2001, bringing the total number to eight. The newly approved programs are Puerto Rico, New Hampshire, Massachusetts, Virginia and Pennsylvania.
- NOAA improved its ability to detect and provide early warning of harmful algal bloom landfall events with the development of rapid identifying techniques for specific types of algae, including *Pfiesteria*. NOAA issued more than a dozen bulletins to alert local and state coastal resource managers and communities on the development, distribution, and movement of harmful algal blooms in the Gulf of Mexico. Advance notice of these blooms helps coastal communities mitigate the impacts of the events by increasing management options for monitoring and harvesting shellfish, and by providing lead time for beach cleanup preparations.
- NOAA archaeologists and U.S. Navy divers successfully recovered the steam engine of the U.S.S. *Monitor* from the waters of the Monitor National Marine Sanctuary. The engine's recovery marks a major milestone for NOAA's long-range plan to recover and preserve the historic Civil War vessel.
- In December 2000, the Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve was created. The area contains over 65 percent of all coral reefs in United States waters and is home to whale, dolphins, endangered Hawaiian monk seals and green sea turtles, and over 200 fish species. The reserve encompasses 99,500 square nautical miles and is the second largest marine protected area in the world. The Reserve is presently undergoing the multi-year process toward becoming the nation's fourteenth National Marine Sanctuary.
- In July 2001, NOAA designated 150 square nautical miles of spectacular deepwater corals and critical fish spawning sites as the Tortugas Ecological Reserve. Located within the Florida Keys National Marine Sanctuary, the Reserve is the largest permanent marine reserve in the U.S. NOAA will enforce a number of regulations and restrictions to shelter coral reefs and the habitat they provide for young fish, and to ensure that the lush ecosystem stays healthy for future generations.
- NOAA's Coral Reef Watch Program made significant improvements in its ability to provide useful
 and timely information to coral reef managers and scientists. Improvements in the accuracy and
 resolution of existing satellite-based near-real time coral reef bleaching products and the addition of
 sea-surface temperature time series and animations were accomplished. NOAA established the first
 Coral Reef Early Warning System (CREWS) buoy in Bahamas at Lee Stocking Island to provide insitu measurements for monitoring of bleaching conditions and satellite ground truthing represented an
 important milestone in this program.
- The NOAA Restoration Center, awarded cooperative agreements to 17 national and regional habitat restoration partners through the Community-Based Habitat Restoration Program. Through these partnerships \$3-\$5 in additional funds per Federal dollar (\$8 million in 2001) were leveraged and invested in restoration efforts. By the end of 2001, the Community-Based Restoration Program had supported 350 on-the-ground fisheries habitat restoration projects since its inception in 1996.
- In FY 2001, through the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA)

Program, the NOAA Restoration Center oversaw the single largest coastal planting project ever carried out in the State of Louisiana. In that year 81,000 smooth cordgrass plants were planted on Chandeleur Island, a barrier island some 30 miles off the coast of St. Bernard and Plaquemines Parishes. The plantings will stabilize the islands, trap sediments and accelerate the spread of grass over the barren sand flats, covering as much ground in two years as nature would cover in ten years.

- The NOAA Chesapeake Bay Office, working with the Maryland Oyster Recovery Partnership, implemented over \$1.2 million in innovative oyster restoration projects in 2001. Oyster restoration efforts in the Chesapeake Bay seek to achieve a 10-fold increase in oysters in the Bay by 2010. The partnership draws on NMFS habitat restoration and monitoring expertise and NOS charting and bottom mapping capabilities to apply the best available science and restoration approaches for site selection, planting and monitoring. More than 30 acres were planted with young seed oysters on newly shelled bottom. Additional acreage was reconditioned by cleaning accumulated sediment off of natural bottom areas before adding hatchery seed. The oyster fishery, once the most valuable fishery on the Bay, has been depleted to approximately 1percent of its original level through overfishing, disease and reef destruction.
- NOAA successfully completed its first Ocean Exploration field season in 2001 with numerous
 accomplishments. During the Islands in the Stream mission, NOAA gained an improved
 understanding of coral reef and hard bottom communities off the Southeastern U.S. Using manned
 submersibles and remotely operated vehicles, scientists documented biological diversity in previously
 unexplored regions. In addition, the deployment of a hydrophone at Pioneer Seamount off the
 California coast, enabled the first real-time Web distribution of underwater sound files to scientists,
 students, and resource managers.
- NOAA was a principal partner in several efforts during FY 2001 to improve regulatory and administrative procedures associated with the hydropower industry. Most noteworthy was completion in late 2000 of a series of eight reports prepared by the "Interagency Task Force to Improve Hydroelectric Licensing Processes." Once implemented, the eight ITF reports on public participation, agency communications, NEPA, ESA consultations, license conditions, alternative procedures, and economics will create a more efficient and effective licensing process, enable NOAA and the other agencies to fulfill their resource management mandates.

The health of our Nation's coasts depends on protecting and restoring marine habitats, improving coastal water quality, and building sustainable coastal communities. NOAA provides the science, information, technology, management and training to make progress on these objectives. The SHC performance measures and accomplishments help illustrate NOAA's progress, but they also show the work that still needs to be done.

Key FY 2003 Activities

While significant progress has been made, water pollution continues to be the number one threat to healthy coastal ecosystems. Reducing runoff pollution and addressing new classes of contaminants that may degrade living marine resources and threaten human health are major concerns that will extend into the new century.

Because harmful algal blooms are increasing in frequency and duration and have been linked to approximately \$1 billion in losses in the past two decades, predicting and reducing hypoxia and harmful

algal blooms will be another priority in the 21st century. In addition, preventing and controlling introductions of invasive alien species will be essential to protect the fisheries and other native species that support coastal communities and economies.

Additional priorities will include reducing the effects of natural hazards; conserving and sustaining coral reefs, and exploring the ocean frontier. The new century will bring us face-to-face with growing concerns about food, security, energy, and environmental and economic health. Solutions to many of these concerns may be found in the ocean and most of it has yet to be explored.

In FY 2003, funding will be invested in increasing the productivity and diversity of fish and wildlife habitats, providing clean coastal waters, reducing the impacts of coastal storms, protecting habitats from multiple threats, and expanding our exploration of the ocean world.

- NOAA will continue its Coastal Storms pilot project in Northeast Florida. Coastal Storms seeks to apply a cross-section of NOAA capabilities to reduce the impacts of severe coastal weather events.
- NOAA will support regional restoration planning efforts for selected areas with a demonstrated need. Building on Coastal Zone Management, the National Estuary Program, and other regional planning, this effort will build consensus at the regional level on restoration priorities; will leverage ongoing efforts to ensure maximum benefit of restoration projects; and will expedite the implementation of projects. Regional plans will also allow industry to resolve their liability for injury to natural resources more efficiently, resulting in lower assessment costs and more timely restoration.
- NOAA will provide increased incentives for industry to voluntarily restore contaminated environments, by providing greater involvement of the industry in the natural resource damage assessment process. This approach to restoring contaminated habitats will encourage corporate initiative while satisfying NOAA's natural resource trustee responsibilities under the Comprehensive Environmental Response, Compensation and Liability Act (Superfund), resulting in increased restoration of coastal areas.
- NOAA will expand its partnership with several states and coastal communities by providing technical assistance, services, and support to strengthen their capabilities to restore or redevelop contaminated sites.
- NOAA will improve the effectiveness of restoration by evaluating habitat restoration techniques and expanding monitoring programs.
- NOAA will improve and enhance the operating and technical capacity in the thirteen national marine sanctuaries by implementing management changes identified through the revisions of sanctuary specific management plans. These changes will improve protection of important sanctuary resources, including coral reefs, endangered marine mammals, sensitive habitats, and significant cultural resources.

- NOAA will continue to address aquatic nuisance species issues in marine and coastal areas. Solutions will be sought to eradicate invasive species from commercial carriers that transport these exotics either in their ballast water or in the infested sediment remaining in their empty ballast tanks.
- NOAA will continue to build on existing coral reef monitoring programs that identify potentially harmful naturally occurring events, such as bleaching. Improved remote sensing products and data from in-situ monitoring devices will be more accessible through improved computing power and internet capabilities to users worldwide. International, inter-agency and cross Line Office collaborations will continue to develop to more effectively monitor coral reefs in crisis.
- NOAA will continue working closely with the U.S. Fish and Wildlife Service and the state to develop a regional restoration plan for Louisiana. The plan will allow for cost-effective assessment of the numerous small spills that occur annually in Louisiana, expedite restoration by doing up-front planning, and provide a mechanism for pooling multiple NRDA recoveries to address pressing restoration needs.

	1998 act.	1999 act.	2000 act.	2001 act.	2002 est.	2003 est.
Protection/Restoration of coastal habitats (cumulative):						
# Acres benefitted		81000	115000	116000	122000	132000
# Damage cases settled	30	37	41	46	51	58
# Interagency restoration projects *	20	12	19	24	28	
# Coastal regions with adequate measures to prevent and control aquatic invasive species (Total 6 U.S. regions)			1	2	2	2
Completion of Coastal protection systems:						
% State Coastal Nonpoint Pollution Programs conditionally approved (% of 35 states)	83	83	86	91	91	97
% State Coastal Zone Management Programs completed (% of 35 States)	91	94	94	94	97	97
% National Estuarine Research Reserves with upgraded capabilities	10	20	31	44	47	63
% National Marine Sanctuaries at baseline operational level	17	25	33	46	54	77
Of 40 Key U.S. Coastal Ecosystems:						
Number with reduced risks from hazardous chemicals (per year)	25	28	30	35	38	38
% with assessments of water quality and natural resources	25	28	30	35	38	38

* In FY 2000, Congress narrowed the scope of the Community-based Restoration Program (CRP) to address the restoration needs of fish resources covered by fishery management plans thus transferring certain projects from Sustain Healthy Coasts to the Build Sustainable Fisheries Strategic Plan. Consequently, the Sustain Healthy Coasts performance measure shows remaining CRP projects.

Major NOAA Acronyms

Advanced Hydrologic Prediction Service
Atlantic Oceanographic Meteorological Laboratory
Automated Surface Observing Systems
Advance Short-term Warnings and Forecasts
Adjustments-To-Base
Build Sustainable Fisheries
Commerce Administrative Management System
Corporate Services
Climate Change Research Initiative
Critical Infrastructure Protection
Comprehensive Large-Array data Stewardship System
Continuously Operating Reference Stations
Coastal Services Center
Civil Service Retirement System
Coastal Zone Management Act
Essential Fisheries Habitat
Electronic Navigation Charts
El Niño Southern Oscillation
Exclusive Economic Zone
Endangered Species Act
Geophysical Fluid Dynamics Laboratory
Global Positioning System
Geostationary Operational Environmental Satellites
High Performance Computing and Communications
Intergovernmental Panel on Climate Change
Implement Season to Interannual Climate Forecasts
Marine Mammal Protection Act
Marine Protected Area
Marine Transportation System (Initiative)
National Center for Environmental Prediction - Environmental Modeling
Center
National Environmental Policy Act
National Estuarine Research Reserve System
National Fish and Wildlife Foundation
National Environmental Satellite, Data, and Information Service
National Marine Fisheries Service
National Marine Sanctuaries

NOS NPOESS NSRS NWS NWSTG	National Ocean Service National Polar Orbiting Environmental Satellite System National Spatial Reference System National Weather Service National Weather Service Telecommunications Gateway
OAR	Oceanic and Atmospheric Research
OFA	Office of Finance and Administration
OMAO	Office of Marine and Aircraft Operations
100	
Bold	Line Offices
Italics	Strategic Plan Goals
ORF Account	Operations Research and Facilities Account
PAC Account	Procurement Acquisition and Construction Account
PS	Program Support
PADCC	Predict and Assess Decadal to Centennial Change
PMEL	Pacific Marine Environmental Laboratory
POES	Polar-Orbiting Operational Environmental Satellite
PSN	Promote Safe Navigation
RPS	Recover Protected Species
SDLM	Standard Depot Level Maintenance
SFA	Sustainable Fisheries Act
SHC	Sustain Healthy Coasts
SWMP	System-Wide Monitoring Program
UNOLS	University-National Oceanographic Laboratory System
USGCRP	United States Global Changes Research Program
USWRP	United States Weather Research Program
VMS	Vessel Management System
WFO	Weather Forecasting Office
YTT	Yard Torpedo Test

Bold	Line Offices
Italics	Strategic Plan Goals

Summary by Appropriation for FY 2003 (Dollars in thousands)

FEDERAL FUNDS:			2003	Increase/
Appropriation:	2001	2002	Estimate	Decrease
Operations Research and Facilities (ORF)	1 925 615	2 253 697	2 281 119	27 422
Procurement Acquisition and Construction (PAC)	681 246	836 552	811 387	(25, 165)
Coastal Ocean Activities (COA)	420,000	0	0	0
Coastal Zone Management Fund	3 192	3 000	3 000	0
Coastal Assistance Fund	(330)	5,000	5,000	0
Fishermen's Contingency Fund	950	952	954	2
Foreign Fishing Observer Fund	153	191	191	0
Pacific Coastal Salmon Recovery Account	73 758	157 419	110 000	(47 419)
CZM Coastal Impact Assistance Fund	0	0	0	0
Fisheries Finance. Program	1.285	287	(57)	(344)
TOTAL APPROPRIATION	3,105,869	3,252,098	3,206,594	(45,504)
TRANSFERS				
Operations, Research, & Facilities				
FROM: Promote & Develop Fishery Products	68,000	68,000	75,000	7,000
Coastal Zone Management Fund	0	3,000	3,000	0
Transfer from USDA	20,000	0	0	0
Coastal & Ocean Activities Transfer	165,500	0	0	0
TO: General Services Administration	(75)			
Subtotal, ORF	253,425	71,000	78,000	7,000
Supplemental				
Operations, Research, & Facilities				
Anti-terrorism (Defense Approps Bill)	0	2,750	0	(2,750)
Procurement, Acquisition & Construction	(0.500	0	0	0
FROM: Coastal and Ocean Activities	68,500	0	0	0
FROM: General Services Administration (Norman, OK)	0	8,000	0	(8,000)
Pacific Coastal Salmon Recovery				
FROM: Coastal and Oceans Activities	36,000	0	0	0
Coastal Impact Assistance Fund	150.000	<u>_</u>	0	0
FROM: Coastal and Oceans Activities	150,000	0	0	0
Coastal Zone Management Fund				
TO: Operations, Research and Facilities	0	(3,000)	(3,000)	0
•				
Coastal and Ocean Activities				
TO: Operations, Research and Facilities	(165,500)	0	0	0
Procurement, Acquisition and Construction	(68,500)	0	0	0
Pacific Coastal Salmon Recovery	(36,000)	0	0	0
Coastal Impact Assistance Fund	(150,000)	0	0	0
Subtotal, COA	(420,000)	0	0	0
Promote & Develop Fishery Products (P&D)				
TO: ORF	(68.000)	(68.000)	(75.000)	(7.000)
FROM: Department of Agriculture	72,828	79,127	79,127	0
Subtotal, P&D	4,828	11,127	4,127	(7,000)
TOTAL TRANSFERS	92 753	89.877	79.127	(10.750)
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,011	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(10,700)
Mandatory Funds				
Environmental Improvement and Restoration Fund	2,108	20,728	11,134	(9,594)
Limited Access Administration Fund	3,000			
Federal Ship Financing Fund	1,500			0
Offset Mandatory CZM Collection Funds	(3,200)	(3,000)	(3,000)	0
NOAA Officer Corp Retirement Fund			35,655	35,655
NOAA Corps Retirement	15,366	16,186	1,000	(15,186)
Fisheries Finance Program Account (Mandatory)	1,478			0
Subtotal, Mandatory Funds,	20,252	33,914	44,789	10,875
TOTAL BUDGET AUTHORITY	3,218,874	3,375,889	3,330,510	(45,379)
Less Mandatory Funds including P&D	(93,080)	(113,041)	(123,916)	(10,875)
DISCRETIONARY BUDGET AUTHORITY	3,125,794	3,262,848	3,206,594	(56,254)

Summary by Activity Operations, Research, and Facilities (ORF) (Dollar amounts in thousands)

	FY 2001 Enacted	FY 2002	Increase/	FY 2003
-		Enacted	Decrease	Request
Operations, Research and Facilities (ORF)				
National Ocean Service	390,141	413,911	23,770	385,347
National Marine Fisheries Service	634,055	579,196	(54,859)	603,455
Oceanic and Atmopsheric Research	327,470	356,062	28,592	296,962
National Weather Service	629,404	672,355	42,951	725,268
National Environmental Satellite, Data and Information Service	124,959	142,377	17,418	151,891
Program Support	81,873	150,336	68,463	176,582
Facilities	11,211	19,090	7,879	24,587
Fleet Maintenance and Planning (Included in Program Support)	10,986	11,120	134	12,027
Subtotal ORF Programs	2,210,099	2,344,447	134,348	2,376,119
Recoveries from prior years/other	(31,059)	(17,000)	14,059	(17,000)
Total Budget Authority (ORF)	2,179,040	2,327,447	148,407	2,359,119
Transfers/Mandatory Funding	(253,425)	(71,000)	182,425	(78,000)
Appropriation (general fund - net) - ORF	1,925,615	2,256,447	330,832	2,281,119
Less Rescission of Unavailable Balance	0	0	0	0
Less Navigation & Fisheries Fees Offset (for later transmittal)	0	0	0	0
FY 2000 Supplemental Appropriation	0	0	0	0
CJS Appropriation - ORF	1,925,615	2,256,447	330,832	2,281,119
Net CJS Appropriation - ORF	1,925,615	2,256,447	330,832	2,281,119

_	FY 2001 Enacted	FY 2002 Enacted	Increase/ Decrease	FY 2003 Request
NOS				
Systems Acquisition				
Construction				
Coastal and Estuarine Land Conservation Program				
Orange County, CA - Land Acquisition	1,995	0	(1,995)	0
Bronx River NY	0	1,500	1,500	0
East River South Bronx NY	0	1,000	1,000	0
Lake Superior, City of Superior WI	0	800	800	0
Elkhorn Slough	0	500	500	0
Hackensack Watershed Study	0	1,200	1,200	0
Kitsap County WA	0	500	500	0
Village Point AL	0	500	500	0
Widewater Peninsula, VA	0	225	225	0
Tasknas Creek, VA	0	275	275	0
Hampstead Habor, NY	0	350	350	0
Lake Ontario, NY	0	350	350	0
Detroit River- Wyandott/Chrysler, MI	0	1,000	1,000	0
NY/NJ Partnership	0	1,500	1,500	0
Warwick RI	0	350	350	0
Worcester City, MD	0	350	350	0
Orange County, CA - Land Acquisition	0	350	350	0
Stamford Mill, CT	0	350	350	0
San Pablo Bay, CA	0	350	350	0
Manchester by the Sea-Gloucester, MA	0	350	350	0
Camp Salmen, LA	0	225	225	0
Deer Island, MS	0	3,800	3,800	0
Subtotal, Coastal and Estuarine Land Conservation Progr	1,995	15,825	13,830	0
NERRS Acquisition/Construction:				
NERRS Construction & Land Acquisition	30,936	0	(30,936)	0
ACE Basin	0	13,500	13,500	0
Great Bay Partnership	2,993	6,000	3,007	0
National Esturaine Research Reserve Construction & Land Acquisition	6,984	8,412	1,428	10,012
Subtotal, NERRS Acquisition/Construction	40,913	27,912	(13,001)	10,012
Marine Sanctuaries Construction:				
Marine Sanctuaries Construction Base	2,993	0	(2,993)	10,000
Florida Keys National Marine Sanctuary	0	6,500	6,500	0
Humpback Whale National Marine Sanctuary	0	1,500	1,500	0
National Monitor Sanctuary	0	5,000	5,000	0
Monterey Bay National Marine Sanctuary	0	1,250	1,250	0
Stellwagen Bank National Marine Sanctuary	0	500	500	0
Grays Reef Sanctuary	0	0	0	0
Subtotal, Marine Sanctuaries Construction	2,993	14,750	11,757	10,000
Other NOS Engilitized				
Vulci 1005 Facilites:	0	000	000	0
Kachemack Day Scivice Facility	0	000	000	0

	FY 2001	FY 2002	Increase/	FY 2003
-	Enacted	Enacted	Decrease	Request
Kasitsna Bay Laboratory	0	5,500	5,500	0
Marine Environmental Health Research Laboratory Enhancement & Equipment	0	14,000	14,000	0
Beaufort Lab Repairs	0	5,000	5,000	0
Coastal Service Center	0	4,000	4,000	0
Lafayette Laboratory	0	0	0	0
Folly Beach Seabrook Tract	1,996	0	(1,996)	0
Pribilof Island Cleanup	5,987	0	(5,987)	0
Subtotal, Other NOS Facilities	7,983	29,300	21,317	0
Subtotal, NOS Construction	53,884	87,787	33,903	20,012
Total, NOS - PAC	53,884	87,787	33,903	20,012
NMFS				
Systems Acquisition				
Construction				
Alaska Facilities Fisheries Center Juneau	14,967	21,100	6,133	0
Aquatic Resources	4,989	5,000	11	0
Botanical Gardens	3,492	4,034	542	0
East Kentucky Pride - Aquatic Research Environmental Initiative	4,989	0	(4,989)	0
East Kentucky Pride - Design & Construction	10,976	0	(10,976)	0
Honolulu	0	3,000	3,000	15,000
National Marine Life Center	798	0	(798)	0
Santa Cruz Facility	0	550	550	0
Sea Life Center	3,991	0	(3,991)	0
Seal Life Center	9,978	0	(9,978)	0
Kodiak Pier	0	2,000	2,000	0
Ketchikan Facilities	0	1,500	1,500	0
Phase III - Galveston Laboratory Renovations	0	0	0	2,000
Subtotal, NMFS Construction	54,180	37,184	(16,996)	17,000
Fleet Replacement				
Fisheries Research Vessel Replacement	8,282	0	(8,282)	0
Subtotal, Fleet Replacement	8,282	0	(8,282)	0
Total, NMFS - PAC	62,462	37,184	(25,278)	17,000

	FY 2001	FY 2002	Increase/	FY 2003	
	Enacted	Enacted	Decrease	Request	
OAR					
Systems Acquisition					
Comprehensive Large Array Data Stewardship	1,995	3,600	1,605	3,600	
Stone Laboratory	0	350	350	0	
Research Supercomputing	3,991	7,750	3,759	6,984	
Subtotal, OAR Systems Acquisition	5,986	11,700	5,714	10,584	
Construction					
Norman Consolidation Project	2,993	16,000	13,007	0	
University of NH Marine Facilities	13,969	0	(13,969)	0	
Subtotal, OAR Construction	16,962	16,000	(962)	0	
Total, OAR - PAC	22,948	27,700	4,752	10,584	
NWS					
Systems Acquisition					
ASOS	3,846	5,125	1,279	5,125	
AWIPS	16,264	16,264	0	16,264	
Evansville Doppler Radar	5,488		(5,488)	0	
NEXRAD	8,261	8,260	(1)	8,260	
NWS WFO Huntsville		3,000	3,000	0	
NWSTG Backup - CIP		7,460	7,460	0	
Radiosonde Network Replacement	4,989	4,989	0	6,989	
Weather and Climate Supercomputing	15,052	15,000	(52)	21,160	
Weather and Climate Supercomputing - Backup				7,148	
Subtotal, NWS Systems Acquisition	53,900	60,098	6,198	64,946	
Construction					
WFO Construction	9,505	10,630	1,125	10,630	
Subtotal, NWS Construction	9,505	10,630	1,125	10,630	
Total, NWS - PAC	63,405	70,728	7,323	75,576	
NESDIS					
Systems Acquisition					
Geostationary Systems	290,184	262,474	(27,710)	227,398	
Polar Orbiting Systems	209,848	295,902	86,054	360,197	
EOS & Advanced Polar Data Processing Distribution & Archiving Systems	0	0	0	3,000	
CIP - single point of failure	0	0	0	2,800	
Coastal Remote Sensing	0	0	0	6,000	
Subtotal, NESDIS Systems Acquisition	500,032	558,376	58,344	599,395	

	FY 2001	FY 2002	Increase/	FY 2003
	Enacted	Enacted	Decrease	Request
Construction				
Satellite CDA Facility	0	3,550	3,550	4,550
Suitland Facility	14,967	0	(14,967)	8,890
Subtotal, NESDIS Construction	14,967	3,550	(11,417)	13,440
Total, NESDIS - PAC	514,999	561,926	46,927	612,835
PS/Corporate Services				
Systems Acquisition				
CAMS	19,779	17,127	(2,652)	16,121
Subtotal, PS/Corporate Services Systems Acquisition	19,779	17,127	(2,652)	16,121
PS/OMAO				
Systems Acquisition				
G-IV Instrumentation Upgrades	0	0	0	8,400
Subtotal, PS/OMAO Systems Acquisition	0	0	0	8,400
PS/OMAO				
Fleet Replacement				
OMAO				
ADVENTUROUS Refurbishment	7,982	4,200	(3,782)	0
ALBATROSS IV Repairs	0	3,000	3,000	0
FAIRWEATHER Refurbishment	6,785	10,500	3,715	0
Small Waterplane Areas Twtin Hull Vessel	0	5,000	5,000	0
T-AGOS Vessel Conservation	0	1,100	1,100	0
T-AGOS Vessel Conservation	0	2,300	2,300	0
T-AGOS Vessel Conservation	0	2,600	2,600	0
GORDON GUNTER Upgrade	0	1,500	1,500	0
Naval Surplus Vessels (YTT)	4,989	3,500	(1,489)	0
Fisheries Research Vessel Replacement #2	0	5,400	5,400	50,874
Hydrographic Equipment Upgrades	0	6,200	6,200	0
Whiting MRP	0	0	0	3,185
Subtotal, OMAO Fleet Replacement	19,756	45,300	25,544	54,059
Total, PS - PAC	39,535	62,427	22,892	78,580
TOTAL OBLIGATIONS	757,233	847,752	90,519	814,587
FINANCING	(7,487)	(3,200)	4,287	(3,200)
TOTAL Discretionary Budget Authority	749,746	844,552	94,806	811,387

NOAA PACIFIC SALMON FUNDING FY 2001-2003 (\$s in millions)

Source of Funds	FY 2001 Enacted	FY 2002 Enacted	FY 2003 Request
Base Funding	\$67.3	\$66.4	\$78.4
ESA Recovery Plan	38.2	38.2	50.2
Other/Base Programs	11.7	11.7	11.7
Columbia River Hatcheries and Facilities	17.4	16.5	16.5
Pacific Coastal Salmon Recovery Fund	90.0	110.0	90.0
Pacific Salmon Recovery	90.0	110.0	90.0
Pacific Salmon Treaty 2/	27.4	54.9	27.5
NMFS Implementation (ORF)	7.4	7.5	7.5
Northern Fund (NMFS)	10.0	20.0	10.0
Southern Fund (NMFS)	10.0	20.0	10.0
WA State Buyout (NMFS)	0.0	5.4	0.0
Pacific Salmon Commission	0.0	2.0	0.0
WA State Buyout (State Dept) 1/	[20.0]	[0.0]	[0.0]
Northern Fund (State Dept) 1/	[10.0]	[0.0]	[12.5]
Southern Fund (State Dept) 1/	[10.0]	[0.0]	[7.5]
Total NOAA Salmon Funding	\$184.7	\$231.3	\$195.9

1/ These are State Department funds.

2/ FY 2003 would capitalize both the Northern and Southern Funds at \$65 million and 475 million respectively. This assumes State Department receives its portion of the request.

OFFICE OF MARINE AND AVIATION OPERATIONS

Planned Fiscal Year 2003 Operating Days of Ship Support for NOAA Programs

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

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

Grand Total	==== 8,216	===== \$124.2
Out-sourced subtotal	4,440***	\$57.2***
Contracts for hydro- graphic data	approx. 990**	\$30.4**
UNOLS	600	\$ 9.1
Private Sector	2,850	\$17.7
Out-sourced		
In-house subtotal	3,776	\$67.0
		\$11.9 Fleet Maint. & Planning
In-house	3,776*	\$55.1* Operations
Op	perating Days	Dollars in Millions

* Operating days have been reduced due to various ships in drydock and extended repair periods. Funding has increased due to reactivation of FAIRWEATHER and inflationary costs.

** Includes contracts for data and vessel lease.

*** Totals for outsourcing are approximate and include backfill charters.

OFFICE OF MARINE AND AVIATION OPERATIONS

Planned Fiscal Year 2003 Operating Days of Ship Support for NOAA Programs

	Operating Days	Percentage
In-house	3,776*	46%
Out-sourced subtotal	4,440**	54%
Total	==== 8,216	==== 100%

* Operating days have been reduced due to various ships in drydock and extended repair periods. Funding has increased due to reactivation of FAIRWEATHER and inflationary costs.

** Totals for outsourcing are approximate and include backfill charters.

National Oceanic and Atmospheric Administration

Estimated Federal Funds for Research & Development Obligations for Research & Development Fiscal Year 2003

(\$ in Thousands)

	Internal Research *	External Research **	Total
National Ocean Service	\$29,922	\$25,192	\$55,114
National Marine Fisheries Service	106,218	15,527	121,745
Oceanic and Atmospheric Research	249,072	34,957	284,029
National Weather Service	21,753	6,001	27,754
Nat'l Environmental, Satellite and Data Inform. Serv	6,103	5,352	11,455
Program Support / OMAO	<u>74,698</u>	<u>0</u>	<u>74,698</u>
Total, NOAA	\$487,766	\$87,029	\$574,795

* Internal Research is composed of NOAA Laboratories, Joint Institutes, Days-At-Sea and Aircraft Operations.

** External Research is composed of grants and contracts.

NOAA RESEARCH

(\$ IN THOUSANDS)

								CSRS	FY 2003		FY 2	003		FY 20	003
NOAA CONTROL TABLE						F	Y 2003	Legislative	Final Base	P	resider	nt's Bud		Presic	lent
	F	Y 2001		FY 2	002	Fir	nal ATB	Proposal		Pr	ogram	Change		Budg	get
Operations, Research and Facilities	E	nacted		Enac	ted										
	FTE	Amount	POS	FTE	Amount	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
Laboratories & Joint Institutes															
Aeronomy Laboratory (Colorado)	40	9,700	10	40	10,165	0	297	363	10,825	0	0	0	10	40	10,825
Atlantic Oceanographic and Meterological Laboratory (Florid	89	11,428	126	89	12,831	0	656	800	14,287	0	0	217	126	89	14,504
Air Resources Laboratory (CO,ID,NC,NV,TN)	40	5,029	41	40	5,524	0	291	356	6,171	0	0	0	41	40	6,171
Climate Diagnostic Center (Colorado)	14	2,377	36	14	2,555	0	107	131	2,793	0	0	0	36	14	2,793
Climate Monitoring and Diagnostic Laboratory (Colorado)	45	5,705	45	45	6,118	0	329	402	6,849	2	1	125	47	46	6,974
Environmental Technology Laboratory (Colorado)	44	7,178	46	44	7,552	0	319	389	8,260	0	0	0	46	44	8,260
Forecast Systems Laboratory (Colorado)	67	10,289	67	67	10,802	0	484	591	11,877	0	0	175	67	67	12,052
Geophysical Fluid Dynamics Laboratory (New Jersey)	74	16,357	76	74	17,306	0	549	671	18,526	0	0	0	76	74	18,526
Great Lakes Environmental Research Laboratory (Michigan)	51	7,942	51	51	8,232	0	377	461	9,070	0	0	0	51	51	9,070
National Severe Storms Laboratory (Oklahoma)	46	7,228	47	46	7,552	0	331	404	8,287	0	0	0	47	46	8,287
Pacific Marine Environmental Laboratory (Washington)	78	15,157	68	78	16,176	0	572	699	17,447	0	0	216	68	78	17,663
Space Environmental Center (Colorado)	47	7,221	47	47	7,478	0	345	422	8,245	4	3	210	51	50	8,455
Subtotal, Laboratories & Joint Institutions	635	105,611	660	635	112,291	0	4,657	5,689	122,637	6	4	943	666	639	123,580

National Marine Fisheries Service Key Species (\$ in thousands)

					FY 2003	3		
			Fisheries	Protected			Pacific Coastal	
	FY 2001	FY 2002	Research &	Species	Habitat	Enforcement &	Salmon	FY 2003
Key Species	Conference	Conference	Mgmt. Services	Research &	Conservation	Surveillance	Recovery	Request
				Mgmt. Services			Fund	
Salmon								
Pacific Salmon	\$184,826	\$231,396	\$26,518	\$57,759	\$1,520	\$180	\$110,000	\$195,977
Atlantic Salmon	\$4,810	\$5,027		\$5,027				\$5,027
Steller Sea Lions	\$43,150	\$40,145		\$22,150				\$22,150
West Coast Groundfish	\$8,545	\$14,995	\$10,150					\$10,150
Northern Right Whales	\$5,000	\$6,850		\$6,850				\$6,850
Hawaiian Monk Seals	\$2,150	\$2,175		\$2,175				\$2,175
Sea Turtles								
Hawaiian Sea Turtles	\$4,500	\$9,300	\$3,000	\$3,300				\$6,300
All Other Sea Turtles	\$6,988	\$5,150		\$7,200				\$7,200

FY 2003 - AUTHORIZATION TABLE

National Oceanic and Atmospheric Administration

Authorizations

(\$ in thousands)

			FY 2003		
					FY 2003
National Marine Fisheries Service		<u>616,380</u>	<u>620,455</u>	<u>4,075</u>	
Endangered Species Act	100-478	101,483	110,845	9,362	Yes
Marine Mammal Protection Act	103-238	31,636	30,823	(813)	Yes
Magnuson-Stevens Fisheries Conservation Act	104-297	251,619	277,430	25,811	Yes
NOAA Marine Fisheries Program Authorization Act	104-297	188,168	163,302	(24,866)	Yes
Interjurisdictional Fisheries Act	104-297	3,190	3,190	0	Yes
Anadromous Fishery Conservation and Management Act	104-297	3,100	2,350	(750)	Yes
Commerce, Justice, State FY 2002 Appropriation Bill	107-77	37,184	17,000	(20,184)	Yes
CSRS Legislative Proposal FY 2003	Legislative Proposal	0	15,515	15,515	Yes
National Ocean Service		<u>501,698</u>	405,359	(96,339)	
Coast and Geodetic Survey Act of 1947 (as updated by	80-373	120,155	119,057	(1,098)	yes
Hydrographic Services Improvement Act PL 105-384)					-
Harmful Algal Bloom and Hypoxia Research and Control Act of 1998	105-383	14,094	14,125	31	yes
Comprehensive Environmental Response, Compensation, & Liability Act*	42 U.S.C. 9601 et seq	13,948	16,511	2,563	no
Oil Pollution Act	33 U.S.C. 2701 et seq				
Marine Protection, Research and Sanctuaries Act of 1972	102-567	28,388	28,990	602	no
FY1995 Commerce, Justice, State Appropriations Act	103-317	21,750	19,281	(2,469)	no
National Fish & Wildlife Foundation	106-408	1,500	1,000	(500)	no
Coral Reef Conservation Act of 2000	106-562	16,000	16,000	0	no
Estuary Habitat Restoration and Partnership Act of 2000	106-457	1,200	1,200	0	no
Coastal Ocean Program	102-567	17,375	14,381	(2,994)	no
Coastal Zone Management Act of 1972	104-150	139,207	120,658	(18,549)	yes
National Marine Sanctuaries Act	106-513	48,950	44,821	(4,129)	no
Commerce, Justice, State FY 2002 Appropriation Bill	107-77	79,131	2,500	(76,631)	yes
CSRS Legislative Proposal FY 2003	Legislative Proposal	0	6,835	6,835	yes
NOAA Research		383,762	307,546	(76,216)	
Weather Service Organic Act of 1890 & Global Change Research Act	653-55 & 15 U.S.C. 2921	245,780	247,285	1,505	no
Coast & Geodetic Survey	33 U.S.C. 883a et seq	19,285	20,927	1,642	no
National Invasive Species Act of 1996	104-332	3,050	800	(2,250)	no
National Sea Grant College Program Act	105-160	62,410	0	(62,410)	**
Commerce, Justice, State FY 2002 Appropriation Bill	107-77	53,237	32,425	(20,812)	yes
CSRS Legislative Proposal FY 2003	Legislative Proposal	0	6,109	6,109	yes

FY 2003 - AUTHORIZATION TABLE

National Oceanic and Atmospheric Administration

Authorizations

(\$ in thousands)

					FY 2003
National Weather Service		<u>743,083</u>	<u>800,844</u>	<u>57,761</u>	
Weather Service Organic Act of 1890	653-55	672,355	696,829	24,474	no
Commerce, Justice, State FY 2002 Appropriation Bill	107-77	70,728	75,576	4,848	yes
CSRS Legislative Proposal FY 2003	Legislative Proposal	0	28,439	28,439	yes
National Environmental Satellite, Data and Information Service		704,303	764,719	<u>60,416</u>	
Weather Service Organic Act of 1890	653-55	703,103	757,342	54,239	no
Land Remote Sensing Policy Act of 1992	15 U.S.C 313	1,200	1,200	0	no
CSRS Legislative Proposal FY 2003	Legislative Proposal	0	6,177	6,177	yes
Program Support		<u>88,950</u>	<u>95,958</u>	<u>7,008</u>	
Commerce, Justice, State FY 2002 Appropriation Bill	107-77	88,950	95,851	6,901	yes
CSRS Legislative Proposal FY 2003	Legislative Proposal	0	107	107	yes
Office of Marine and Aviation Operations		<u>134,933</u>	<u>172,231</u>	<u>37,298</u>	
U.S. Code 33 883i (Marine)	80-373	120,249	138,009	17,760	no
Commerce, Justice, State FY 2002 Appropriation Bill	107-77	14,684	25,215	10,531	yes
CSRS Legislative Proposal FY 2003	Legislative Proposal	0	9,007	9,007	yes
Facilities		<u>19,090</u>	24,587	<u>5,497</u>	
Pribilof Islands Transition Act	106-562	6,000	10,000	4,000	no
Commerce, Justice, State FY 2002 Appropriation Bill	107-77	13,090	14,087	997	yes
CSRS Legislative Proposal FY 2003	Legislative Proposal	0	500	500	yes
		3,192,199	3,191,699	(7,508)	

Sea Grant is proposed for transfer to NSF, which claims that its own authorizations are sufficient for Sea Grant.

The current Sea Grant authorization runs until the end of FY 2003.

					FY 2003
	FY 2002	ATBs/Terminations/	FY 2003	Program	President's
	Enacted	Base Roll up	Base	Change	Budget
NATIONAL OCEAN SERVICE:					
Navigation Services					
Mapping and Charting	\$47,763	\$2,406	\$50,169	\$0	\$50,169
Address survey backlog	26,985	(8,535)	18,450	9,850	28,300
Subtotal	74,748	(6,129)	68,619	9,850	78,469
Geodesy	25,112	142	25,254	188	25,442
Tide and Current Data	20,295	(2.026)	<u>18,269</u>	<u>0</u>	<u>18,269</u>
Total, Navigation Services	<u>120,155</u>	<u>(8,013)</u>	112,142	10,038	122,180
Ocean Resources Conservation and Management:					
Estuarine and Coastal Assessment					
Ocean assessment program	94,763	(18,809)	75,954	(1,000)	74,954
Response & restoration	28,373	(11,974)	16,399	2,000	18,399
Oceanic and coastal research	<u>10,100</u>	<u>351</u>	<u>10,451</u>	<u>0</u>	<u>10,451</u>
Subtotal	133,236	(30,432)	102,804	1,000	103,804
Coastal Ocean Science					
Coastal ocean program	<u>21,575</u>	<u>(1,776)</u>	<u>19,799</u>	<u>(985)</u>	<u>18,814</u>
Subtotal	21,575	(1,776)	19,799	(985)	18,814
Total, Ocean Resource Conserv. and Assess	<u>154,811</u>	(32,208)	122,603	<u>15</u>	122,618
Ocean and Coastal Management:					
Coastal Management					
CZM grants	68,963	0	68,963	0	68,963
CZM program administration	6,382	224	6,606	0	6,606
National estuarine research reserve system	16,400	0	16,400	0	16,400
Great Lakes Community Grants	0	0	0	0	0
Nonpoint Pollution Implementation Grants	10,000	0	10,000	0	10,000
Marine Protected Areas	<u>3,000</u>	<u>0</u>	<u>3,000</u>	<u>0</u>	<u>3,000</u>
Subtotal	104,745	224	104,969	0	104,969
Ocean Management					
Marine Sanctuary Program	<u>34,200</u>	<u>680</u>	<u>34,880</u>	<u>700</u>	<u>35,580</u>
Subtotal	34,200	680	34,880	700	35,580
Total, Ocean and Coastal Management	<u>138,945</u>	904	139,849	700	140,549
TOTAL, NOS	413,911	(39,317)	374,594	10,753	385,347

	FY 2002 Enacted	ATBs/Terminations/ Base Roll up	FY 2003 Base	Program Change	FY 2003 President's Budget
NATIONAL MARINE FISHERIES SERVICE: Fisheries Research & Management Services:	2.140104	Dave Henry	2000	onango	Daagot
Science and Technology	168,170	(569)	167,601	8,406	176,007
Alaskan groundfish surveys and research.	7.996	0	7.996	0	7.996
Cooperative research	14,500	(5.000)	9.500	0	9,500
Driftnet Act implementation	2,400	0	2,400	0	2,400
Economics and social sciences research	2,500	0	2,500	1.500	4.000
Fisheries Information Networks/Data collection	20.875	0	20.875	0	20.875
Observers/training	14 050	0	14 050	2 905	16 955
Subtotal	230,491	(5,569)	224,922	12,811	237,733
Conservation and Management	66,427	(8,934)	57,493	2,600	60,093
Interjurisdictional fisheries grants	2,590	0	2,590	0	2,590
International fisheries commissions	400	0	400	0	400
Interstate fish commissions	8,000	0	8,000	0	8,000
Regional Councils	14,150	882	15,032	1,000	16,032
Columbia River hatcheries & facilities	13,157	3,365	16,522	0	16,522
Pacific Salmon Treaty	<u>7,456</u>	<u>0</u>	<u>7,456</u>	<u>0</u>	<u>7,456</u>
Subtotal	112,180	(4,687)	107,493	3,600	111,093
Total, Fisheries Research & Management Services	342,671	(10,256)	332,415	16,411	348,826
Protected Resources Research & Management Services:	~~~~		4 - 6 - 6		
Science and Technology	26,370	(10,498)	15,872	(301)	15,571
Habitat conservation		0		0	0
Antarctic research	1,550	0	1,550	0	1,550
Atlantic Salmon	2,427	0	2,427	0	2,427
Pacific Salmon	17,749	0	17,749	10,000	27,749
Sea Turtles	8,150	0	8,150	1,400	9,550
Marine mammals - Steller sea lions	27,650	(500)	27,150	(5,000)	22,150
Marine mammals - other	<u>25,250</u>	<u>(1,400)</u>	<u>23,850</u>	<u>1,045</u>	<u>24,895</u>
Subtotal	109,146	(12,398)	96,748	7,144	103,892
Conservation and Management	9,819	10,959	20,778	2,150	22,928
Habital conservation	2 600	0	2 600	0	0
Allantic Salmon	2,600	0	2,600	0	2,600
Pacific Salmon	20,500	0	20,500	2,000	22,500
Marine mammais - otner	5,150	(008)	4,350	0	4,350
Marine mammais - Steller sea lions	2,495	(2,495)	0	0	0
Native Alaskan marine mammais	950	<u>U</u>	950	<u>U</u>	950
Subtotal	41,514	7,664	49,178	4,150	53,328
Total, Prot. Resources Research & Mgmnt Svcs	150,660	(4,734)	145,926	11,294	157,220
Habitat Conservation Research & Management Services:	45.400	7 500	22.002	(000)	22,402
	15,460	7,533	22,993	(800)	22,193
Coral reets	<u>11,000</u>	<u>0</u>	<u>11,000</u>	<u>U</u>	<u>11,000</u>
Subtotal	26,460	7,533	33,993	(800)	33,193
Fisheries Habitat Restoration	<u>18.085</u>	<u>(4,863)</u>	<u>13,222</u>	<u>0</u>	<u>13,222</u>
Subtotal	18,085	(4,863)	13,222	0	13,222
Total, Habitat Conservation Research & Mgmnt Svcs	44,545	2,670	47,215	(800)	46,415
Enforcement and Surveillance Services:					
Enforcement	26,295	2,274	28,569	7,400	35,969
Partnerships in Enforcement	15,025	0	15,025	0	15,025
Total, Enforcement and Surveillance Services	<u>41,320</u>	<u>2,274</u>	<u>43,594</u>	<u>7,400</u>	<u>50,994</u>
TOTAL, NMFS	579,196	(10,046)	569,150	34,305	603,455

	FY 2002	ATBs/Terminations/	FY 2003	Program	FY 2003 President's
OCEANIC AND ATMOSPHERIC RESEARCH:	Enacled	Base Roll up	Base	Change	Budget
Climate Research:	10 1 10	4.070			
Laboratories and Joint Institutes	49,143	4,878	54,021	558	54,579
Climate and Global Change Program	73,725	231	73,956	(1,121)	72,835
Climate Observations and Services	23,550	0	23,550	18,000	41,550
Other Partnership Programs	3,750	(3,250)	500	1,500	2,000
Total, Climate Research	150,168	<u>1.859</u>	152,027	<u>18,937</u>	170,964
Weather and Air Quality Research:					
Laboratories and Joint Institutes	43,863	3,826	47,689	385	48,074
USWRP	10,250	(6,378)	3,872	6,100	9,972
Other Partnership Programs	1,349	1,651	3,000	(2,000)	1,000
Total, Weather and Air Quality Research	55,462	<u>(901)</u>	54,561	4,485	<u>59,046</u>
Ocean, Coastal, and Great Lakes Research:					
Laboratories and Joint Institutes	19,285	1,642	20,927	0	20,927
National Sea Grant College Program	62,410	0	62,410	(62,410)	0
National Undersea Research Program	16,270	(2,349)	13,921	0	13,921
Ocean Exploration	14,000	233	14,233	0	14,233
Other Partnership Programs	25,667	(20,596)	5,071	0	5,071
Total, Ocean, Coastal, and Great Lakes Research	137,632	<u>(21.070)</u>	116,562	(62,410)	54,152
Information Technology, R&D, and Science Education:					
Energy Improvement Plan	0	0	0	0	0
GLOBE	0 12 800	0	0 12 800	0	0 12 800
	12,000	. ⊻	0	⊻ ⊻	12,000
Total, Information Technology, R&D, & Science Ed	12,800	<u>0</u>	12,800	<u>0</u>	12,800
TOTAL, NOAA RESEARCH	356,062	(20,112)	335,950	(38,988)	296,962

	FY 2002 Enacted	ATBs/Terminations/ Base Roll up	FY 2003 Base	Program Change	FY 2003 President's Budget
NATIONAL WEATHER SERVICE:					
Operations and Research:					
Local Warnings and Forecasts	528,924	37,745	566,669	1,388	568,057
AHPS	1,500	218	1,718	4,500	6,218
Aviation safety	0	0	0	2,500	2,500
Fire weather forecasting	0	0	0	0	0
WFO maintenance	4,390	0	4,390	3,000	7,390
Weather radio transmitters	<u>4,370</u>	<u>(2,050)</u>	<u>2,320</u>	<u>0</u>	<u>2,320</u>
Subtotal	539,184	35,913	575,097	11,388	586,485
Central Forecast Guidance	41,925	3,554	45,479	0	45,479
Total, Operations and Research	581,109	39,467	<u>620,576</u>	<u>11,388</u>	631,964
Systems Operation and Maintenance:					
Public Warning and Forecast Systems					
NEXRAD	43,096	763	43,859		43,859
ASOS	11,650	(2,925)	8,725		8,725
AWIPS	36,500	1,220	37,720		37,720
NWSTG backup CIP	<u>0</u>	<u>0</u>	<u>0</u> 0	<u>3,000</u>	<u>3.000</u>
Total, Systems Operation and Maintenance	<u>91,246</u>	(942)	90,304	3,000	93,304
TOTAL, NWS	672,355	38,525	710,880	14,388	725,268

	FY 2002 Enacted	ATBs/Terminations/ Base Roll up	FY 2003 Base	Program Change	FY 2003 President's Budget
NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE: Environmental Satellite Observing Systems:					
Satellite Command and Control	32,461	2,168	34,629	2,510	37,139
Product Processing and Distribution	21,000	1,602	22,602	5,050	27,652
Product Development, Readiness & Application	23,268	1,393	24,661	1,100	25,761
Commercial Remote Sensing Licensing & Enforcement	1,200	0	1,200	0	1,200
Total, Environmental Satellite Observing Systems	77,929	<u>5,163</u>	83,092	8,660	<u>91,752</u>
NOAA's Data Centers & Information Services: Archive, Access and Assessment	44,600	2,885	47,485	(4,194)	43,291
Coastal Data Development	4,513	0	4,513	0	4,513
Regional Climate Centers	3,000	(3,000)	0	0	0
Environmental Data Systems Modernization	12,335	0	12,335	0	12,335
Total, NOAA's Data Centers & Information Services	<u>64,448</u>	<u>(115)</u>	64,333	<u>(4,194)</u>	60,139
TOTAL, NESDIS	142,377	5,048	147,425	4,466	151,891

	FY 2002	ATBs/Terminations/	FY 2003	Program	FY 2003 President's
PROGRAM SUPPORT:	Enacted	Base Roll up	Base	Change	Budget
Corporate Services: Under Secretary and Associate Offices	21,823	1,868	23,691	2,146	25,837
	05.000	(1.05.1)	00.040	5 054	00.000
Policy Formulation and Direction	35,000	(1,354)	33,646	5,354	39,000
Subtotal	<u>15,000</u> 50,000	(1,354)	48,646	<u>0</u> 5,354	<u>15,000</u> 54,000
Total, Corporate Services	<u>71,823</u>	<u>514</u>	<u>72,337</u>	<u>7,500</u>	<u>79,837</u>
Office of Marine and Aviation Operations (OMAO):					
CSRS Legislative Proposal		5,970	5,970	0	5,970
Marine Operations					
Data acquisition	63.829	2.366	66,195	815	67.010
UNOLS (davs at sea)	00,0_0	2,000	00,100	2,500	2,500
FAIRWEATHER Operations	0		0	4,100	4,100
YTT Operations	0		0	350	350
FRV staffing	0		0	0	0
Crew retention	0		Ő	Ő	0
Elect planning and maintenance	11 120	207	11 327	700	12 027
Subtotal	74,949	2,573	77,522	8,465	85,987
Aviation Operations					
Aircraft services	14 684	1 131	15 815	1 000	16 815
Subtotal	14,684	1,131	15,815	1,000	16,815
Total, OMAO	89,633	<u>9.674</u>	99,307	9,465	108,772
Eacilities:					
NOAA Maintenance, Repairs and Safety	11,090	(2,455)	8,635	3,402	12,037
Environmental Compliance	2,000	0	2,000	0	2,000
Project Planning and Execution					
Energy Management	0	0	0	550	550
Pribilof Island Cleanup (moved from PAC)	6.000	0	6.000	4,000	10.000
Subtotal	6,000	0	6,000	4,550	10,550
Total, Facilities	19,090	(2,455)	<u>16,635</u>	7,952	24,587
TOTAL, PROGRAM SUPPORT	180,546	7,733	188,279	24,917	213,196
DIRECT OBLIGATIONS, ORF	2,344,447	(18,169)	2,326,278	49,841	2,376,119
FINANCING'					
De-obligations (direct)	(17 000)	(17 000)		(17 000)
General Services Administration (from ORE)	(17,000	/	(17,000)		(17,000)
			0		0
ATP increase			0		0
CSDS logislation			0		0
House error/Senate CZME transfer error			0		0
Adjustments for travel, office supplies, equipment			0		0
Adjustments for travel, once supplies, equipment			0		0
DISCRETIONARY BUDGET AUTHORITY, ORF	2,327,447	(18,169)	2,309,278	49,841	2,359,119
Transfers:					
Promote and develop American fisheries	(68,000) (7,000)	(75,000)		(75,000)
Coastal and Ocean Activities	0		0		
General Services Administration					
USDA for Norton Sound	0		0		
Coastal Zone Management Fund	(3,000)	(3,000)		(3,000)
APPROPRIATION, ORF	2,256.447	(25,169)	2,231,278	49,841	2,281,119
ŕ					

	FY 2002	ATBs/Terminations/	FY 2003	Program	FY 2003 President's
	Enacted	Base Roll up	Base	Change	Budget
PROCUREMENT, ACQUISITION & CONSTRUCTION (PAC): NOS		· · · · · ·			
Systems Acquisition	0		0		
Construction					
Base	0		0		0
Coastal and Estuarine land conservation	15,825	(15,825)	0		0
Kachemak Bay service facility	800	(800)	0		0
Kasitsna Bay laboratory	5,500	(5,500)	0		0
Marine Environmental Health Research lab	14,000	(14,000)	0		0
Pribilof Island cleanup (moved to ORF in 02)	0		0		0
Beaufort Lab Repairs	5,000	(5,000)	0		0
Coastal Service Center	4,000	(4,000)	0		0
Marine Sanctuaries	14,750	(14,750)	0	10,000	10,000
NERRS construction and land acquisition	27,912	(19,500)	8,412	1,600	10,012
Western Region Center office expansion	<u>0</u>		<u>0</u>		<u>0</u>
Subtotal	87,787	(79,375)	8,412	11,600	20,012
Total, NOS PAC	87,787	(79,375)	8.412	11,600	20,012
NMES					
Systems Acquisition	0		0		0
Construction					
Base	0		0		0
Kodiak Pier	2,000	(2,000)	0		0
Ketchikan facilities	1,500	(1,500)	0		0
Aquatic Resources continuation	5,000	(5,000)	0		0
NY Botanical Gardens continuation	4,034	(4,034)	0		0
Santa Cruz Laboratory	550	(550)	0		0
Alaska Facilities Fisheries Center Juneau	21,100	(21,100)	0		0
Honolulu	3,000	0	3,000	12,000	15,000
Galveston Laboratory renovation phase III	<u>0</u>	<u>0</u>	<u>0</u>	<u>2,000</u>	<u>2,000</u>
Subtotal	37,184	(34,184)	3,000	14,000	17,000
Fleet Replacement					
Fisheries Research Vessel	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	0	0	0	0	0
Total, NMFS PAC	<u>37,184</u>	<u>(34,184)</u>	3.000	14,000	17,000
NOAA RESEARCH					
Systems Acquisition					
Comprehensive Large Array Data Stewardship System	3,600	0	3,600	0	3,600
Stone Laboratory	350	(350)	0	0	0
Research Supercomputing	<u>7,750</u>	<u>0</u>	<u>7,750</u>	<u>(766)</u>	<u>6,984</u>
Subtotal	11,700	(350)	11,350	(766)	10,584
Construction					
Base	0	0	0	0	0
Norman Consolidation	<u>16,000</u>	<u>(16,000)</u>	<u>0</u>	<u>0</u>	<u>0</u>
Subtotal	16,000	(16,000)	0	0	0
Total, NOAA RESEARCH PAC	27,700	<u>(16,350)</u>	11,350	<u>(766)</u>	<u>10,584</u>

					FY 2003	
	FY 2002 Enacted	ATBs/Terminations/	FY 2003 Base	Program Change	President's Budget	
		Base Roll up				
NWS				Ŭ	Ŭ	
Systems Acquisition						
ASOS	5,125	0	5,125	0	5,125	
AWIPS	16,264	0	16,264	0	16,264	
COOP Modernization	0	0	0	0	0	
NEXRAD	8,260	0	8,260	0	8,260	
NWSTG backup CIP	7,460	0	7,460	(7,460)	0	
NCEP/NESDIS CIP	0	0	0	0	0	
Radiosonde Network Replacement	4,989	0	4,989	2,000	6,989	
Evansville doppler radar	0	0	0	0	0	
Weather and Climate Supercomputing	15,000		15,000	6,160	21,160	
Weather and Climate Supercomputing Backup	<u>0</u>	<u>0</u>	<u>0</u>	<u>7,148</u>	<u>7,148</u>	
Subtotal	57,098	0	57,098	7,848	64,946	
Construction						
Huntsville WFO	3,000	(3,000)	0	0	0	
WFO Construction	<u>10,630</u>	<u>0</u>	<u>10,630</u>	<u>0</u>	<u>10,630</u>	
Subtotal	13,630	(3,000)	10,630	0	10,630	
Total, NWS PAC	70,728	<u>(3,000)</u>	67,728	<u>7,848</u>	75,576	
NESDIS						
Systems Acquisition						
CIP single pt of failure	0	0	0	2,800	2,800	
Geostationary Systems	262,474	0	262,474	(35,076)	227,398	
Polar Orbiting Systems	295,902	659	296,561	63,636	360,197	
EOS & adv polar data processing, dist. & archiving sys	0	0	0	3,000	3,000	
NOAA/NASA coastal ocean remote sensing	0	0	0	6,000	6,000	
Satellite Altimetry	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	
Subtotal	558,376	659	559,035	40,360	599,395	
Construction						
Continuity of critical facilities	3,550	0	3,550	1,000	4,550	
Suitland facility	<u>0</u>	<u>0</u>	<u>0</u>	<u>8,890</u>	<u>8,890</u>	
Subtotal	3,550	0	3,550	9,890	13,440	
Total, NESDIS PAC	561,926	659	562,585	50,250	612,835	
NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION FY 2003 President's Budget (Dollars in Thousands)

	FY 2002	ATBs/Terminations/	FY 2003	Program	FY 2003 President's
_	Enacted	Base Roll up	Base	Change	Budget
PROGRAM SUPPORT					
Systems Acquisition					
CAMS	17,127	0	17,127	(1,006)	16,121
G-IV instrumentation upgrades (OMAO)	<u>0</u>	<u>.</u>	<u>0</u>	<u>8,400</u>	<u>8,400</u>
Subtotal	17,127	0	17,127	7,394	24,521
Construction	0		0		
Fleet Replacement					
ADVENTUROUS refurbishment	4,200	(4,200)	0	0	0
ALBATROSS IV repairs	3,000	(3,000)	0	0	0
FAIRWEATHER refurbishment	10,500	(10,500)	0	0	0
GORDON GUNTER	1,500	(1,500)	0	0	0
Naval Surplus Vessels coastal instrumentation (YTT)	3,500	(3,500)	0	0	0
Small waterplane area twin hull vessel	5,000	(5,000)	0	0	0
T-AGOS vessel conversion	6,000	(6,000)	0	0	0
Fisheries Research Vessel replacement	5,400	0	5,400	45,474	50,874
Hydrographic equipment upgrades	6,200	(6,200)	0	0	0
Whiting MRP	<u>0</u>	<u>.</u>	<u>0</u>	<u>3,185</u>	<u>3,185</u>
Subtotal	45,300	(39,900)	5,400	48,659	54,059
Total, PS/OMAO PAC	62,427	(39,900)	22,527	56,053	78,580
TOTAL OBLIGATIONS, PAC	847,752	(172,150)	675,602	138,985	814,587
De-obligations CSRS legislation	(3,200) 0	(3,200)	0	(3,200) 0
DISCRETIONARY BUDGET AUTHORITY, PAC	844,552	(172,150)	672,402	138,985	811,387
Transfers: Coastal and Ocean Activities					
GSA Federal Buildings Fund	(8,000) 8,000	0	0	0
APPROPRIATION, PAC	836,552	(164,150)	672,402	138,985	811,387
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NATIONAL OCEANIC & ATMOSPHERIC ADMINISTRATION FY 2003 President's Budget (Dollars in Thousands)

					FY 2003	
	FY 2002	ATBs/Terminations/	FY 2003	Program	President's	
	Enacted	Base Roll up	Base	Change	Budget	
OTHER ACCOUNTS, B.A.:				Ŭ		
Coastal Impact Assistance Fund (NOS)	0	0	0		0	
Coastal Zone Management Fund (NOS)	0	0	0		0	
Fishermen's Contingency Fund (NMFS)	952	2	954		954	
Foreign Fishing Observer Fund (NMFS)	191	0	191		191	
Fisheries Financing Program (NMFS)	287	(344)	(57)	0	(57)	
Promote and Develop Fisheries (NMFS)	(68.000) (7.000)	(75.000)		(75.000)	
Pacific Coastal Salmon Fund (NMFS)	157,419	(7,419)	150.000	(40.000)	110.000	
Coastal and Ocean Activities account	0	() - /	0	(-,,	0	
DISCRETIONARY B.A., Other accounts	90,849	(14,761)	76,088	(40,000)	36,088	
Transfers:						
Coastal and Ocean Activities (to other NOAA accts)	0		0		0	
Promote and Develop Fisheries (to NMFS)	68,000	7,000	75,000		75,000	
Coastal Zone Management Fund (to NOS)	3,000		3,000		3,000	
					· · · · ·	
APPROPRIATION., Other accounts	161,849	(7,761)	154,088	(40,000)	114,088	
TOTAL DISCRETIONARY B.A., NOAA	3,262,848	(205,080)	3,057,768	148,826	3,206,594	
TOTAL APPROPRIATION, NOAA - All Accounts	3,254,848	(197,080)	3,057,768	148,826	3,206,594	
MANDATORY FUNDING:						
Coastal Zone Management Fund offsetting collections	(3.000) 0	(3.000)	0	(3.000)	
FSFF	0	0	0	0	0	
FFPA	0	0	0	0	0	
EIRF	20,728	(9,594)	11,134	0	11,134	
Transfer from USDA to P&DAF	79,127	Ú Ú	79,127	0	79,127	
NOAA Corps Retirement Fund	,	35,655	35,655		35,655	
NOAA Corps Retirement Pay (ORF)	16,186	(15,186)	1,000	0	1,000	
	113 041	10.875	123 016	0	123 016	
	110,041	10,075	120,010	0	120,010	
TOTAL BUDGET AUTHORITY, NOAA	\$3,375,889	(\$194,205)	\$3,181,684	\$148,826	\$3,330,510	

Advance Short-Term Warning and Forecast Service

	FY	2002		FY 2003	INC./DEC			
	En	acted		Request	(REQ.	- ENACTED)		
Participation By Activity	FTE	AMT.	FTE	AMT.	FTE	AMT.		
Oceanic and Atmospheric Research	236	66,403	244	57,711	8	(8,692)		
National Weather Service	4,726	741,193	4,726	798,954		57,761		
National Environmental Satellite, Data & Information Service	533	635,105	533	696,838		61,733		
Corporate Services	430	39,556	482	47,374	52	7,818		
Office of Marine and Aviation	91	13,405	100	29,151	9	15,746		
Facilities Maintenance	7	8,320	7	9,480		1,160		
Subtotal, Advance Short-Term Warning & Forecast Services	6,023	1,503,982	6,092	1,639,508	69	135,526		

Implement Seasonal to Interannual Climate Forecasts

	FY	2002	I	FY 2003	II	JC./DEC
	Ena	acted]	Request	(REQ.	- ENACTED)
Participation By Activity	FTE	AMT.	FTE	AMT.	FTE	AMT.
Oceanic and Atmospheric Research	6	83,140	5	78,941	(1)	(4,199)
National Weather Service		1,890		1,890		
National Environmental Satellite, Data & Information Service	256	63,948	256	59,639		(4,309)
Corporate Services	150	4,109	107	4,318		209
Office of Marine and Aviation	60	8,127	62	10,794	2	2,667
Facilities Maintenance	2	397	2	454		57
Subtotal, Implement Seasonal to Interannual Climate Forecasts	474	161,611	432	156,036	1	(5,575)

Predict and Assess Decadal to Centennial Climate Change

	FY	7 2002]	FY 2003	INC./DEC			
	Er	nacted		Request	(REQ ENACTED)			
Participation By Activity	FTE	AMT.	FTE	AMT.	FTE	AMT.		
Oceanic and Atmospheric Research	361	109,090	365	125,945	4	16,855		
National Environmental Satellite, Data & Information Service		500		3,500				
Corporate Services	33	3,078	42	4,097		1,019		
Office of Marine and Aviation	61	10,066	62	15,084	1	5,018		
Facilities Maintenance	1	297	1	431	(0)	134		
Subtotal, Predict and Assess Decadal to Centennial Climate Change	456	123,531	470	149,557	5	23,026		

Promote Safe Navigation

	F	Y 2002		FY 2003	INC./DEC			
	E	nacted		Request	(REQ ENACTED)			
Participation By Activity	FTE	AMT.	FTE	AMT.	FTE	AMT.		
National Ocean Service	625	120,154	632	122,182	7	2,028		
Oceanic and Atmospheric Research		900		900				
Corporate Services	48	4,439	45	4,462		23		
Office of Marine and Aviation	137	45,922	200	34,101	63	(11,821)		
Facilities Maintenance	1	429	1	467		38		
Subtotal, Promote Safe Navigation	811	171,844	878	162,112	70	(9,732)		

Build Sustainable Fisheries

	FY	¥ 2002		FY 2003	П	NC./DEC
	Eı	nacted		Request	(REQ.	- ENACTED)
Participation By Activity	FTE	AMT.	FTE	AMT.	FTE	AMT.
National Ocean Service		9,931		9,931		
National Marine Fisheries Service	1,529	440,994	1,587	426,143	58	(14,851)
Oceanic and Atmospheric Research	79	41,435	59	12,068	(20)	(29,367)
Corporate Services	45	14,454	44	15,900		1,446
Office of Marine and Aviation	264	43,094	265	90,246	1	47,152
Facilities Maintenance	1	1,396	1	1,671		275
Subtotal, Build Sustainable Fisheries	1,918	551,304	1,956	555,959	39	4,655

Recover Protect Species

	FY	7 2002		FY 2003	Π	NC./DEC
	Er	nacted		Request	(REQ.	- ENACTED)
Participation By Activity	FTE	AMT.	FTE	AMT.	FTE	AMT.
National Ocean Service	8	3,000	8	3,000		
National Marine Fisheries Service	655	330,490	691	291,997	36	(38,493)
Oceanic and Atmospheric Research		400		400		
Corporate Services	157	9,527	162	9,183	5	(344)
Office of Marine and Aviation	51	17,854	54	13,641	3	(4,213)
Facilities Maintenance	2	920	2	965		45
Subtotal, Recover Protected Species	873	362,191	917	319,186	44	(43,005)

Sustain Healthy Coasts

	FY	2002	F	Y 2003	IN	IC./DEC
	Ena	acted	F	Request	(REQ	ENACTED)
Participation By Activity	FTE	AMT.	FTE	AMT.	FTE	AMT.
National Ocean Service	603	378,976	608	275,815	5	(103,161)
National Marine Fisheries Service	149	25,235	162	23,097	13	(2,138)
Oceanic and Atmospheric Research	103	82,394	105	31,581	2	(50,813)
National Environmental Satellite, Data & Information Service		4,750		4,750		
Corporate Services	104	13,787	93	10,623	(11)	(3,164)
Office of Marine and Aviation	69	12,652	73	14,868	4	2,216
Facilities Maintenance	2	7,331	1	11,117	(1)	3,786
Subtotal, Sustain Healthy Coasts	1,030	525,125	1,042	371,851	12	(153,274)

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3 4 5 6 7	FY2003 Strategic	FY 03 PROPOSED OPERATING PLAN	F	Y 2001		FY 200	2	Base Role up /Terminations		FY 20 Final A	03 ATB	CSRS Legislative Proposal	FY 2003 Final Base	P Pr	FY 2 residen ogram	003 nt's Bud Change		FY 200 Preside Budge	3 nt t
8	Team	Operations, Research and Facilities	FTE	Amount	POS	FTE	u Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9 10 11		Navigation Services																	
12		Mapping & Charting																	
13	PSN	Mapping & Charting Base	338	34,481	242	340	37,183	5,387		1	1,359	1,660	45,589			0	242	341	45,589
14	PSN	Seacoast Science Center		299			0						0			0		0	0
15	DEN	Seadoast Science Center (COA)		990			1 000	(1.000					0			0		0	0
17	PSN	Joint Hydrographic Center		2 574			2 580	(1,000					2 580			0		0	2 580
18	PSN	Joint Hydrographic Center - Bathymetric Study		2,07			750	(750					2,000			0		Ű	2,000
19	PSN	Electronic Navigation Charts					3,350	(3,350					0			0			0
20	PSN	Electronic Navigation Charts - AK					900	(900					0			0			0
21	PSN	Shoreline Mapping					2,000	(2,000					0			0			0
22	PSN	Address Survey Backlog/Contracts		20,405			22,450	(2,000					20,450			0		0	20,450
23	PSN	Gulf of Mexico and Lake Pontchartain		0			4,535	(4,535					0		6	0		0	0 050
24	PON	Vessei Lease/Time Charter	338	58 757	242	340	74 748	(9 148	0	1	1 359	1 660	68 619	c s	6	9,650	250	0 347	9,000 78,469
20			000	56,757	242	040	14,140	(3,140	,		1,000	1,000	00,013	,	J	3,000	200	041	70,400
27		Geodesy																	
28	PSN	Geodesy Base	183	19,591	197	183	20,612	250			739	903	22,504			188	197	183	22,692
29	PSN	National Spatial Reference System					250	(250					0			0			0
30	PSN	National Spatial Reference System		0			0						0			0		0	0
31	PSN	Height Modernization Study - NGS Implementation		249			250						250			0		0	250
32 22	PSN	Height Modernization Study NC		998			1,000						1,000			0		0	1,000
34	PSN	Geodetic Survey- LA		990			1,000	(1.000					1,000			0		0	1,000
35	PSN	Geodetic Survey- WI					500	(500					0			0			0
36	PSN	S. Carolina Geodetic Survey		499			500						500			0		0	500
37		Subtotal, Geodesy	183	22,335	197	183	25,112	(1,500	Q	C	739	903	25,254	O	0	188	197	183	25,442
38																			
39	PSN	Tide & Current Data	102	15,056	141	102	13,250	4,000			459	560	18,269			0	141	102	18,269
40	PSN	PORTS					4,000	(4,000					0			0			0
41 12	PSN	Coastal Storms					2,045	(2,045)					0			0			0
46		Subtotal, Tide & Current Data	102	15.056	141	102	20,295	(3.045	a	o	459	560	18,269	o	0	0	141	102	18.269
49							20,200	(0,010)					10,200		, i	Ŭ			.0,200
50	PSN	Acquisition of Data (Moved to Program Support)	206	19,204									0						0
51		Total, Navigation Services	829	115,352	580	625	120,155	(13,693	0	1	2,557	3,123	112,142	8	6	10,038	588	632	122,180
52																			
53																			
04 55		Ocean Resources Conservation and Assessment																	
56		Estuarine and Coastal Assessment																	
57		Ocean Assessment Program (OAP)																	
58	SHC	Ocean Assessment Program Base	221	43,161	181	222	13,721	31,962			1,270	1,551	48,504			250	181	222	48,754
59	SHC	Coastal Observation Technology System					500	(500					0			0			0
60	SHC	Center for Integrated Marine Technologies					2,000	(2,000					0			0			0
62 62	SHC	Wave Current Information System					1,000	(1,000					0			0			0
62	SHC	Alliance for Coastal Technologies					2,000	(2,000					0			0			0
64	SHC	Coastal Storms					750	(750					0			0			0
65	SHC	Beaufort/Oxford					3,917	(3,917					0			0			0
66	SHC	Pfiesteria Research and HAB Rapid Response					3,925	(3,925					0			0		0	0
67	SHC	Coastal Services Center					18,000	(18,000					0						0
68	SHC	Pacific Coastal Center					1,750	(1,750					0			0			0
69 70	SHC	Coastal Change Analysis					2,000	(2,000					0			0			0
70 71	SHC	Harmtul Algal Blooms					5,000	(5,000					0			0			0
72	SHC	CREST					450	(1,350					0			0			0
73	SHC	CI-CORE					1,750	(1,750					0			0			0

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				NAT	IONAL OCEAN	SERVICE										

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4 5 6	FY2003 Strategic	FY 03 PROPOSED OPERATING PLAN	F	Y 2001		FY 200	2	Base Role up /Terminations		FY 20 Final A	03 ATB	CSRS Legislative Proposal	FY 2003 Final Base	P Pr	FY 2 residen ogram	003 t's Bud Change		FY 2003 Preside Budge	3 nt t
7 8	Plan Team	Operations, Research and Facilities	FTE	Amount	POS	Enacte FTE	d Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9 74 75 76 77 78 79 80 81 82 83 84 85 86	SHC SHC SHC SHC SHC SHC SHC SHC SHC SHC	Pfiesteria Research SC Dept of Marine Resources Coop Institute for Coastal and Estuarine Enviro Tech Hawai Coral Reef Initiative Nart Coral Reef Initiative Coral Reef - Puerto Rico DNER Coral Reef Program Louisiana Department of Natural Resources - Marsh Research (COA) National Fish and Wildliffe Foundation - NFWF JASON Education and Outreach South Florida Ecosystem Naragansett Explore the Bay Program National Ocean Science Education Program May River Ecosystem		499 5,787 998 499 13,969 2,993 998 2,494 898			600 6,550 1,000 500 14,000 2,500 900 2,000 1,500 10	(600 (2,000 (1,500 (10)					0 6,550 500 14,000 0 14,000 2,500 900 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0 (750 0 0 0 0 (500 0 0 0 0 0 0 0 0 0 0 0 0		0 0 0 0 0 0 0	0 5,800 1,000 500 14,000 1,000 2,500 900 0 0 0
87 89 90	SHC	New Bedford Oceanarium Research Program Subtotal, Ocean Assessment Program (OAP)	221	72,795	181	222	3,000 94,763	(3,000 (21,630)	(Q	1,270	1,551	0 75,954	d	0	0 (1,000	181	222	0 74,954
91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 108 109 111 112 113 114 115 116 117	SHC SHC SHC SHC SHC SHC SHC SHC SHC SHC	Response and Restoration Base Estuarine and Coastal Assessment Estuarine Restoration Program Damage Assessment Program Oil Pollution Act of 1990 Coastal Protection and Restoration Program Oil Skimmer NH Regional Restoration Program - LA Coastal Remediation Program - LA Coastal Remediation Program - LA Coastal Remediation Program - LA Rejonal Restoration Program - LA Coastal Remediation Technology LaFourche Parish - LA Palmyra Atoll Bioremediation Aquatic Resources Environmental Initiative River Restorations - DuPage, Detroit, Lower Rouge (COA) N.H. Dept of Environmental Services (COA) Subtotal, Response and Restoration Oceanic and Coastal Research Fish Forensics/Enforcement MERHL Mtriffi's Inlet Special Area Pfiesteria/Toxins Research Subtotal, Ocean and Coastal Research Subtotal, Ocean and Coastal Research Subtotal, Ocean and Coastal Research	96 96 67 384	11,575 11,475 998 24,048 9,479 9,479 106,322	129 129 61 371	103 103 67 392	2,078 2,670 1,200 5,200 1,000 2,000 750 2,000 750 8,500 28,373 6,000 1,300 1,300 1,000 10,100	11,87C (2,670 (5,200 (1,000 (2,000 (225 (1,000 (750 (2,000 (750 (8,500) (13,225 3,80C (1,300 (1,300 (1,500 (300) (1,000 (300) (300)		2	563 563 293 2,126	688 688 358 358 2,597	15,199 0 1,200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	a 0	0	2,000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	129 129 61 371	0 0 105 67 394	17,199 0 1,200 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
118 119		Coastal Ocean Science			-		,	(,								,			
120 121 122 123 124 125 126 127	BSF SHC SHC SHC SHC SHC SHC	Coastal Ocean Program Base Coastal Ocean Program Base South Carolina Sea Grant Land Use Program ECOHAB Hypoxia South Florida Ecosystem Long-term Estuary Assessment Consortium Mississippi River/Gulf of Mexico Nutrient Watershed	24	17,050 1,197	21	24	9,931 2,959 4,200 1,085 1,200 1,200 1,000	6,485 (4,200 (1,085 (1,200 (1,200 (1,000			191	233	9,931 9,868 0 0 0 0 0 0 0 0			0 (985) 0 0 0 0 0	21	0 24 0	9,931 8,883 0 0 0 0 0 0
128 129 130 131 132		Subrotal, Coastal Ocean Science Total, Ocean Resources Conserv. & Assess. Ocean and Coastal Management	408	18,247 124,569	21 392	24 416	21,575 154,811	(2,200) (37,355)	(2	191 2,317	233 2,830	19,799	0 0	0	(985)	392	24 418	18,814
133 134 135	SHC	Coastal Management CZM Grants		60,367			68,963						68,963			0		0	68,963

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4 5	FY2003	FY 03 PROPOSED OPERATING PLAN		v 0004		EV 000		Base Role up /Terminations		FY 20 Final A	03 ATB	CSRS Legislative	FY 2003 Final Base	Р	FY 2 Presiden	003 ht's Bud		FY 2003 Presider	B nt
6	Strategic		F	Y 2001		FY 200	2					Proposal		P	rogram	Change		Budget	
7	Plan	Operations, Research and Facilities	Er	nacted		Enacte	d												
8	Team		FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																			
136	SHC	CZMA Program Administration	55	2,794	64	57	6,382			1	101	123	6,606			0	64	58	6,606
137	SHC	National Estuarine Research Reserve System		14,718			16,400						16,400			0		0	16,400
138	SHC	Great Lakes Community Grants		29,934									0			0		0	0
139	SHC	Nonpoint Pollution Control											0			0		0	0
140	SHC	Nonpoint Pollution Implementation Grants		9,978			10,000	d					10,000			0		0	10,000
141	RPS	Marine Protected Areas		0		8	3,000						3,000			0		8	3,000
142		Subtotal, Coastal Management	55	117,791	64	65	104,745	a	0	1	101	123	104,969	0	0	0	64	66	104,969
143		0 H																	
144																			
145	0110	Marine Sanctuary Program					00 500					750	04.000			700			05 500
146	SHC	Marine Sanctuary Program Base	113	31,930	145	116	33,500	(700		1	621	759	34,880			700	145	117	35,580
147	SHC	Northwest Straits Citizens Advisory Commission		499			700	(700					0			0			0
148		Subtotal, Ocean Management	113	32,429	145	116	34,200	(700	0	1	621	759	34,880	C	0	700	145	117	35,580
149		Total Ocean and Constal Management	169	150 220	200	101	129 045	(700	0	-	700	000	120 840			700	200	102	140 540
150		rotal, Ocean and Coastal Management	100	150,220	203	101	130,945	(700		2	122	002	139,049			700	203	103	140,549
151		Total National Ocean Complex ODE																	
152		Total, National Ocean Service - ORF	1,405	390,141	1,181	1,222	413,911	(51,748	U U	5	5,596	6,835	374,594	5	6	10,753	1,189	1,233	385,347
153																			
154		Other National Ocean Service Accounts																	
155		Total, National Ocean Service - PAC	C	53,884	C	C	87,787	(79,375	C	C	0	0	8,412	C	0	11,600	C	0	20,012
156		Total, National Ocean Service - Other	15	152,863	15	15	10,364	C	C	0	(4,796	0	5,568	0	0	0	15	15	5,568
157		GRAND TOTAL NATIONAL OCEAN SERVICE	1,420	596,888	1,196	1,237	512,062	(131,123	0	5	800	6,835	388,574	8	6	22,353	1,204	1,248	410,927
158																			
159																			
160	BSF	Build Sustainable Fisheries	0	0	0	0	9,931	0	0	0	0	0	9,931	C	0	0	0	0	9,931
161	PSN	Promote Safe Navigation	829	114,354	580	625	120,155	(13,693	0	1	2,557	3,123	112,142	8	6	10,038	588	632	122,180
162	RPS	Recover Protected Species	0	0	0	8	3,000	Q	0	0	0	0	3,000	C	0	0	0	8	3,000
163	SHC	Sustain Healthy Coasts	576	275,787	601	589	280,825	(38,055	0	4	3,039	3,712	249,521	0	0	715	601	593	250,236

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4	-							Base Role up		FY 20	03	CSRS	FY 2003		FY	(2003		FY 20	J3
5	FY2003	FY 03 PROPOSED OPERATING PLAN		EV 2004		EV 200		/Terminations		Final A	атв	Legislative	Final Base		Presid	ent's Bud		Presid	ent
6	Strategic	On another a Dessent and Fasilities		FY 2001		FY 200	2					Proposal		F	rogra	m Change		Budg	et
/ 8	Team	Operations, Research and Facilities	ETE	Amount	POS	Enacte	a Amount	Amount	POS	ETE	Amount	Amount	Amount	POS	FTF	Amount	POS	FTF	Amount
9	Team		FIE	Amount	F03	FIE	Amount	Amount	FU3	FIE	Amount	Amount	Amount	F03		Amount	F03	FIE	Amount
10		Fisheries Research and Management Services															1		
11		Science and Technology																	
12	BSF	Base	1043	60,219	1,492	1,064	65,040	1,613		5	5,275	6,443	78,371				1,492	1,069	78,371
13	BSF	Information analysis and Dissemination		21,104			21,890						21,890				C	C	21,890
14	BSF	AKFIN		2,993			3,200						3,200				C	C	3,200
15	BSF	Alaska Fisheries Development Foundation					750	(750					C			C	C		0
16	BSF	Alaska Groundfish Monitoring - Base		2,082			2,087						2,087			C	C	C	2,087
17	BSF	Alaska Groundfish Monitoring - Bering Sea Fishermen's Association CDQ		150			150						150			C	C	C	150
18	BSF	Alaska Groundfish Monitoring - Crab Research		848			850						850			C	C	C	850
19	BSF	Alaska Groundfish Monitoring - Gulf of Alaska Coastal Communities		175			175						175			C	C	C	175
20	BSF	Alaska Groundfish Monitoring - NMFS Field Fishery Monitoring		299			300						300			C	C	Q	300
21	BSF	Alaska Groundfish Monitoring - NMFS Rockfish Research		349			350						350			0	C	Q	350
22	BSF	Alaska Groundfish Monitoring - Rockfish Research/Crab		238			238						238			(u c	u a	238
23	DOF	Alaska Groundrish Monitoring - State of AK Crab, Scallop License Limitation		1,597			1,000						1,000				0	u d	1,000
24	BSF	Alaska Groundlish Monitoling - Winter Polick Survey		660			661						1,000			(0	d	661
20	BSF	Alaskan Groundfish Surveys - Calibration Studies		238			240						240			· · · · ·	d	d	240
27	BSE	Alaskan Groundfish Surveys and Research		200			2.10						2.0			C	d	d	2.0
28	BSF	American Fisheries Act - Base		3.518			3.525						3.525				d	d	3.525
29	BSF	Aquaculture		-,			-,						0,010				d	d	0
30	BSF	Atlantic Herring and Mackerel		200			200						200			C	C	c	200
31	BSF	Bering Sea Pollock Research		943			945						945			C	C	C	945
32	BSF	Bluefin Tuna Tagging		599			850						850				C	c	850
33	BSF	Bluefish/Striped Bass - Base		698			700						700			C	C	C	700
34	BSF	Bluefish/Striped Bass - Rutgers		798			827						827				C	C	827
35	BSF	Charleston Bump Billfish Tagging					150	(150					C			C	C		0
36	BSF	Chinook Salmon Research at Auke Bay		299			300						300			C	C	C	300
37	BSF	Computer Hardware and Software		3,492			3,492						3,492				C	C	3,492
38	BSF	Cooperative Research											C			C	C	d	0
39	BSF	Cooperative Research - National Cooperative Research/ OMB base Line		2,993			2,750						2,750				C	Q	2,750
40	BSF	Cooperative Research - NE Cooperative Research		14,967			3,750						3,750				u c	u a	3,750
41	BSE	Cooperative Research - NEC Cooperative Marine Education & Research		200			200						200			L. L.	0	0	200
42	PPS	Cooperative Research SE Cooperative Research		2 495			3 000						3 000			C	0	0	3 000
44	BSE	Cooperative Research Northeast Consortium		4 980			5,000	(5.000					3,000			,	0	d	3,000
45	RPS	Driftnet Act Implementation/Base		1,796			1,800	(0,000					1.800			C	d	d	1.800
46	RPS	Driftnet Act Implementation/Pacific Rim Fisheries		150			150						150			0	d	d	150
47	RPS	Driftnet Act Implementation/Science Observer Russian EEZ		249			250						250			C	C	c	250
48	RPS	Driftnet Act Implementation/State Participation - AK/WA		200			200						200			C	C	d	200
49	BSF	Expand Stock Assessments - Improve Data Collection		1,696			2,000						2,000	35	26	9,906	35	26	11,906
50	BSF	Fish Statistics - Atlantic States Marine Fisheries Commission		1,497			2,000						2,000				C	C	2,000
51	BSF	Fish Statistics - Economics & Social Sciences Research		1,996			2,500						2,500	9	7	1,500	9	7	4,000
52	BSF	Fish Statistics - National Fisheries Information System					2,575						2,575				C	C	2,575
53	BSF	Fish Statistics - National Standard 8		998			1,000						1,000			C	C	C	1,000
54	BSF	Fish Statistics Base		13,151			13,900						13,900				C	C	13,900
55 EC	BSF	Fisheries Development Program - Hawaiian Fisheries Development		748			750						750				C	C	750
00 57	BSF	Fisheries Development Program - Product Quality and Safety/Seafood Inspection		8,310			8,685						8,685			(0	0	8,685
52	BSF	Fisheries Oreanography		u d			1 000						1 000			t	0	0	1 000
50 59	BSF	Great South Bay Hard Clame					250	(250					1,000			(0	U	1,000
60	BSF	Gulf and South Atlantic Fisheries					400	(400					0				c		0
61	BSF	GULF FIN Data Collection Effort		3.492			3.500	(400					3.500			(c	C	3.500
62	BSF	Gulf of Maine Groundfish Survey		566			567						567			(d	C	567
63	BSF	Gulf of Mexico Consortium		2,495			2,750						2,750			(1,500	C	C	1,250
64	BSF	Hawaii Stock Management Plan		499			500	(500					C				C	C	0
65	BSF	Highly Migratory Shark Fishery Research Program					1,500	(1,500					a			C	C		0
66	BSF	JIMAR		2,245			2,475						2,475				C	C	2,475
67	BSF	Lobster Sampling		150			150						150			C	C	C	150
68	BSF	Magnuson Stevens Implementation off Alaska		4,340			4,350						4,350			C	C	C	4,350

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4	EV2002							Base Role up		FY 20	03 TD	CSRS	FY 2003		FY	(2003		FY 200	J3
5	FT2003 Strategic	FY 03 PROPOSED OPERATING PLAN		EV 2001		EV 200	2	/ I erminations		Final A	ПВ	Proposal	Final Base		Presia	ent's Bud m Change		Presia	ent
7	Plan	Operations, Research and Facilities		Enacted		Fnacte	d					rioposai			rogra	monarige		Duug	21
8	Team		FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																			
69	BSF	MARFIN - Base		2,495			2,500						2,500			d	C	C	2,500
70	BSF	MARFIN - NE Activities		249			250						250			Q	Q	C	250
71	BSF	MARFIN Red Snapper		748			750						750			Q	C	C	750
72	BSF	MarMap		5 986			850 6.000	(6.000					850			u	0	0	850
73	BSF	NEPA - Impact on Ocean Climate Shins (OAR)		1 996			2 000	(0,000					0				d	0	0
75	BSE	NEPA - Steller Sea Lion/Pollock Research		1,000			2,000	(2,000					d				d	C	0
76	BSF	New England Stock Depletion		998			1,000	(2,000					1,000			d	d	C	1,000
77	BSF	NMFS Facilities Maintenance		3,991			4,000						4,000				c	C	4,000
78	BSF	Observers - Fishery Observers		C			750						750	5	4	3,250	5	4	4,000
79	BSF	Observers/Training											C			d	C	C	0
80	BSF	Observers/Training - Atlantic Coast Observers		3,342			3,350						3,350			d	C	C	3,350
81	BSF	Observers/Training - East Coast Observers		349			350						350			C	C	C	350
82	BSF	Observers/Training - Hawaii Longline Observer Program		1,197			3,000						3,000				d	0	3,000
83	RPS	Observers/Training - N. Pacific Marine Resources Observers		1,871			1,875						1,875			U	0	0	1,875
84 95	BSF	Observers/Training - N. Pacific Observer Program		424 2 270			4 075						4 075			(345	0	0	3 730
86	BSF	Ocean Coastal & Waterway/Pascagoula (COA)		998			4,070						4,070			(040	0	0	0,700
87	BSF	PACEIN Catch Effort Data		2,993			3.000						3.000			d	d	d	3.000
88	BSF	Pacific Highly Migratory Species Research		_,			750						750			-	d	C	750
89	BSF	Recreational Fishery Harvest Monitoring RECFIN		3,692			3,450						3,450				d	C	3,450
90	RPS	Recreational Fishery Harvest Monitoring RECFIN - SC					250						250				C		250
91	RPS	Red Snapper Monitoring and Research		7,484			5,000						5,000				C	C	5,000
92	BSF	Reduce Fishing Impacts on EFH		C			500						500				C	C	500
93	BSF	SEAMAP		1,397			1,400						1,400			C	C	C	1,400
94	BSF	Shrimp Pathogens		299			299	(299				C	C	299
95	BSF	South Carolina Taxonomic Center		349			350	(350					C				Q	C	0
96	BSF	Swordfish Research		399									Q				C C	C	0
97 98	BSF	West Coast Groundfish		4.241			5.220						5.220			U	d	c	5.220
99	BSF	West Coast Groundfish		818			-,						0,0				d	C	0
100		Subtotal, Science and Technology	1,043	225,147	1,492	1,064	230,491	(17,287	C	5	5,275	6,443	224,922	49	37	12,811	1,541	1,106	237,733
101																			
102		Conservation and Management																	
103	BSF	Base	261	10,381	296	265	7,775	(283		16	2,181	2,664	12,337				296	281	12,337
104	BSF	Alaska Near Shore Fisheries		998			998	(998					0			C	C	C	0
105	BSF	American Fisheries Act - Base		2,170			2,174						2,174				U C	C C	2,174
100	BSE	American Fisheries Act - N. Pacific Council American Eisberies Act - State of Alacka		499			499						499				0	0	499
107	BSE	Andremous Fish Commission North Davida		433			750	(750					433			0	0	U	433
109	BSF	Anadromous Grants		2.095			2,100	(750)					2.100				d	c	2,100
110	BSF	Bering Sea Crab (Alaska)		998			1,000						1,000			(400	d	C	600
111	RPS	Columbia River Facilities		C				3,365					3,365				C	C	3,365
112	BSF	Columbia River Hatcheries - Mass Marketing		299									C			d	C	C	0
113	BSF	Columbia River Hatcheries - Monitor, Evaluation and Reform		1,696			1,700						1,700				C	C	1,700
114	BSF	Columbia River Hatcheries - WA State Fall Chinook Rearing		599									C				C	C	0
115	BSF	Columbia River Hatcheries and Facilities		11,430			11,457						11,457				C	C	11,457
116	BSF	Cooper River Coridor Management					150	(150					C			C	C		0
117	BSF	Fisheries Development Program - Hawaii Longline Fishery Economic Assistance		2,993									C			C	C	0	0
118	BSF	Fisheries Development Program - SW Alaska Mun Eco Disaster Relief		29,934									C			Q	C	C	0
119	BSF	Fisheries Development Program - Western Alaska Salmon Disaster Assist		7,484			24.055	10 500					07.057			d	Q	0	0
120	BSF	Habitat Conservation		29,224			31,255	(3,598					27,657				0	0	27,657
122	BSF	Halihuit/Sahlefish		1 107			1 200						1 200			U	d	0	1 200
123	BSF	Hawaiian Community Development		499			500	(500					1,200			C	d	C	1,200
124	BSF	Interjurisdictional Fisheries Grants		2.584			2.590	,500					2.590			d	0	C	2.590
125	BSF	International Fisheries Commissions		399			400						400			d	d	C	400
126	BSF	Interstate Fish Commissions - 3 Commissions		748			750						750				C	C	750
127	BSF	Interstate Fish Commissions - Atlantic Cooperative Management		7,234			7,250						7,250				C	C	7,250

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			NA	TIONAL MA	RINE FISHERI											
				(\$ 11	N THOUSANDS											

FY 2003 CSRS FY 2003 FY 2003 FY 2003 4 Base Role up FY 03 PROPOSED OPERATING PLAN 5 FY2003 /Terminations Final ATB Legislative Final Base President's Bud President FY 2001 FY 2002 6 Strategic Proposal Program Change Budget 7 Plan **Operations, Research and Facilities** Fnacted Enacted 8 Team FTE Amount POS FTE Amount Amount POS FTE Amount Amount Amount POS FTE Amount POS FTE Amount 9 128 BSF Kotzebue Sound Test (King Crab & Sea Snail) 20 129 BSF Magnuson Stevens Implementation off Alaska 2,046 2,050 2,050 2,050 130 BSF 47 47 478 Management of George's Bank 478 131 RPS National Enironmental Policy Act (NEPA) -- Hawaiian Sea Turtles 3,000 (3,000 132 BSF NEPA - NMFS 7,983 5,000 5,000 3,00 8,000 2.000 (2.000 133 BSF Oregon Groundfish Cooperative Research 134 1,500 BSE Oregon Groundfish Disaster Assistance (1,500 135 1.000 BSF Oregon Groundfish Outreach Program (1.000 136 RPS Pacific Salmon Treaty - Base 5,60 5,612 5,612 5,612 137 BSF Pacific Salmon Treaty - Chinook Salmon Agreement 1,844 1,844 1,84 1.84 1.000 1.000 138 BSF Refine EFH Designations 1.00 139 BSF Regional Councils 13.12 14.150 397 48 15.032 1.00 16.032 140 BSF Transfer from USDA - Norton Sound 4,98 141 1,000 BSF Yukon River Chinook Salmon - Base 99 1,000 1,000 142 Yukon River Chinook Salmon - Yukon River Drainage Fisheries Assoc BSF 49 49 499 49 143 Subtotal, Conservation and Management 26 151,774 296 265 112.180 (10,41 2,57 107,49 3,600 281 111,093 3,149 29 144 145 1.304 376,921 332,415 348.826 Total, Fisheries Research and Management Services 1.788 1,329 342.671 (27.701 21 7.853 9.592 40 3. 16.411 1.837 1.387 146 147 rotected Resources Research and Management Services 148 Science and Technology RPS 476 10.124 12.037 10.522 10.522 149 Base 539 490 (3,421 858 1,048 539 490 150 BSF 1.550 1,550 Antarctic Research 1,49 1,550 151 RPS Atlantic Salmon 152 RPS Atlantic Salmon Research 70 710 710 710 153 28 290 290 RPS Columbia River Endangered Species Studies 290 154 RPS Conservation and Recovery with States 1,00 1,000 155 3.300 RPS Dolphin Encirclement 3.29 3.300 3.30 156 RPS Dolphin/Yellowfin Tuna Research 24 250 25 250 157 1,717 1,71 1.717 1,71 RPS Endangered Species Act - Atlantic Salmon 158 RPS Endangered Species Act - Columbia River BIOP Implementation 10.000 10.000 159 RPS Endangered Species Act - Marine Mammals, Sea Turtles & Other Species 9,51 3,500 3,50 3,500 2.700 2 70 2 700 160 RPS Endangered Species Act - Other Species 161 17 450 17,450 RPS Endangered Species Act - Pacific Salmon Recovery 17.41 17.45 162 RPS Endangered Species Act - Right Whale Activities 1.59 2.250 2.25 2.250 163 RPS Endangered Species Act - Right Whale Activities NE Consortium 2,89 1,00 1,00 1,000 164 4,500 RPS Endangered Species Act - Sea Turtles 4,50 1,400 5,900 (6,358 165 RPS Habitat Conservation 4,432 6,358 166 RPS Hawaiian Monk Seals 825 825 825 79 167 RPS Hawaiian Sea Turtles 29 300 30 300 2.640 168 2.640 RPS Marine Mammal Protection - Base 2.66 2,640 169 4.435 4.480 4 435 RPS Marine Mammal Protection - Base 45 170 RPS Marine Mammal Protection - Erysipelas Research 150 (15 900 171 RPS Marine Mammal Protection - State of Alaska Harbor Seal Research 89 900 900 172 RPS Marine Mammal Strandings 4,000 4,00 4,000 173 3.000 RPS NEPA - Hawaiia Sea Turtle Research 2 993 3.00 3.000 174 RPS Pacific Salmon 175 RPS Protected Species Management - Base 3,736 5,275 (3,875 1,400 (51 1,349 (1,250 176 RPS Protected Species Management - Bottlenose Dolphin Research 74 2.000 2.000 750 177 RPS 34 35 350 Rancho Nuevo Sea Turtles 35 178 RPS Recovery of Endangered Large Whales 1.000 1.000 179 RPS Right Whales 180 RPS Sea Turtle Research RPS 181 Sea Turtles 182 RPS Steller Sea Lion Recovery Plan - Alaska Fisheries Foundation 500 (500 183 RPS Steller Sea Lion Recovery Plan - Alaska Sea Life Center 5,98 5,000 5,00 (2,300 2,700 184 16,800 16,800 RPS Steller Sea Lion Recovery Plan - Base 21,95 16,800 185 RPS Steller Sea Lion Recovery Plan - N. Pacific Universities MM Consortium 79 3.500 3.50 (2.700 800 186 Steller Sea Lion Recovery Plan - Univ of AK Gulf Apex Predator go 1.00 1.00 1.000 RPS

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3 FY 2003 FY 2003 FY 2003 4 Base Role up CSRS FY 2003 5 FY2003 FY 03 PROPOSED OPERATING PLAN /Terminations Final ATB Legislative Final Base President's Bud President FY 2001 FY 2002 6 Strategic Proposal Program Change Budget 7 Plan **Operations, Research and Facilities** Fnacted Fnacted 8 Team FTE Amount POS FTE POS FTE Amount POS FTE POS FTE Amount Amount Amount Amount Amount Amount 9 187 RPS Steller Sea Lions 188 RPS Steller Sea Lions - Endangered Species Act 84 850 850 85 189 47 109.146 (14.304 96.748 7.144 103.892 Subtotal, Science and Technology 96.800 539 490 858 1.04 13 556 503 17 190 191 Conservation and Management Services 2.150 RPS 162 170 4.985 2.478 3.027 12.069 179 14,219 192 Base 5,313 164 1,579 20 190 193 BSF Atlantic Salmon 194 BSF Atlantic Salmon Recovery Plan 450 450 44 450 195 BSF Chinook Salmon Management 15 150 150 150 196 Columbia River BIOP Implementation 2.000 RPS 2.000 197 RPS Cook Inlet Beluga 150 15 150 198 500 500 RPS Endangered Species Act - Atlantic Salmon 27 50 199 RPS Endangered Species Act - Pacific Salmon Recovery 20,44 20,500 20,50 20,500 200 2,100 RPS Endangered Species Act - Right Whale Activities 50 2,10 2.100 201 RPS Endangered Species Act - Right Whale Cooperative State Plans 1.500 1,50 1.500 202 RPS Habitat Conservation 1,700 4 54 203 RPS Marine Mammal Protection - Base 204 RPS Marine Mammal Strandings 3.99 205 RPS Marine Mammal Strandings - Charleston Health and Risk Assessment 800 (800 206 RPS Marine Mammals 207 RPS Native Marine Mammals 208 RPS Native Marine Mammals - Alaska Eskimo Whaling Commission 39 400 400 400 209 RPS Native Marine Mammals - Alaska Harbour Seals 150 150 150 150 210 RPS Native Marine Mammals - Aleut Pacific Marine Resources Observers 125 125 125 125 225 211 Native Marine Mammals - Beluga Whale Committee 225 225 225 RPS 50 212 RPS Native Marine Mammals - Bristol Bay Native Association 5 50 5 213 RPS Protected Species Management - Base 2,289 3,234 3,875 7,109 7,109 74 750 750 750 214 RPS Protected Species Management - California Sea Lions 1,000 215 RPS 99 1,000 1,000 Protected Species Management - NFWF Species Management 216 Protected Species Management - State of Maine Salmon Recovery 1.500 RPS 1.497 1,500 1.500 217 BSF 29 300 300 300 Southeastern Sea Turtles 218 150 150 BSF State of Maine Recovery Plan 15 15 219 RPS Steller Sea Lion Recovery Plan - State of Alaska Work 2.495 2.495 (2 49 220 Subtotal Conservation and Management Services 16: 46,800 170 16 41.51 2 15 2 47 3 02 49 17 4 150 20 53,328 3 2 18 221 143,600 145,926 222 Total, Protected Resources Research and Management Services 638 709 654 150,660 (12,145 3.336 4,075 40 3. 11,294 758 691 157,220 223 224 labitat Conservation Research and Management Services 225 Sustainable Habitat Management 226 SHC 112 86 111 112 1,500 3,062 59 5,875 2,000 128 125 7,875 Bas 72 227 Aquatic Resources Environmental Initiative 7,98 BSF 228 BSF Blue Crab Research Consortium 1,500 1,50 (900 600 229 BSF Charleston Bump 299 300 300 300 1.200 230 SHC Chesapeake Bay Environmental Education Program (1.20 231 500 BSF 500 500 Chesapeake Bay Multi-Species Management 49 232 2.000 850 BSF Chesapeake Bay Oyster Research 84 2.00 (1.150 233 SHC Chesapeake Bay Studies 1,99 2,750 2,75 (750 2,000 234 10.97 11,000 11,000 BSF Coral Reef 11.00 235 BSF Habitat Conservation 2.860 9.21 9.218 2.85 6.35 236 BSF Magnuson Stevens Implementation off Alaska 84 850 85 850 237 SHC Mobile Bay Oyster Recovery 1,000 (1,000 238 1,000 SHC Wetland Herbivory Control (1.000 239 Subtotal Sustainable Habitat Management 11 27 167 111 112 26.460 6.220 59 722 33.993 (800 33.193 12 125 240 241 Fisheries Habitat Restoration 242 SHC 13,22 13,222 Base 1,195 12,400 520 13 16 243 BSF Brony River Recovery and Restoration 49 244 BSF Connecticut River Partnership 29 300 (300 245 1 50 (1.50 SHC Fisheries Habitat Restoration - Bronx River Restoration (COA) 8 48

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4								Base Role up		FY 20	03	CSRS	FY 2003		F١	/ 2003		FY 20	03
5	FY2003	FY 03 PROPOSED OPERATING PLAN						/Terminations		Final A	ТВ	Legislative	Final Base		Presid	ent's Bud		Presid	ent
6	Strategic			FY 2001		FY 200	2					Proposal		F	Progra	m Change		Budg	et
7	Plan	Operations, Research and Facilities		Enacted		Enacte	d												
8	Team		FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																			
246	SHC	Fisheries Habitat Restoration - LA DNR					1,385	(1,385					C			C	C	C	0
247	SHC	Fisheries Habitat Restoration - Pinellas County Environmental Foundation (COA)		1,497			1,500	(1,500					c			C	C	C	0
248	SHC	Habitat Conservation		7,983									c			C	C	C	0
249	BSF	Habitat Conservation		1,072									C			C	C	C	0
250	SHC	Marsh Restoration - NH					1,000	(1,000					C			C	C	C	0
251		Subtotal, Fisheries Habitat Restoration	37	21,026	9	37	18,085	(5,165	0	O	136	166	13,222	o	Q	C	9	37	13,222
252																			
253		Total, Habitat Conservation Research Management Services	149	48,193	120	149	44.545	1.055	0	0	727	888	47.215	17	13	(800	137	162	46,415
254		·····, ·······························					,	.,					,=			(***			
255		Enforcement and Surveillance Services																	
256		Enforcement																	
257	RPS	Driftnet Act Implementation/Base		1 332			1 375						1 375			0	C	0	1 375
258	BSE	Enforcement and Surveillance - Base	169	18 514	220	196	20,420	528			786	960	22 694			2 000	220	196	24 694
259	RPS	Enforcement and Surveillance - Cooperative Agreements w/States		2 445	220		2 500	020				000	2 500			2,000	0		2 500
260	BSE	Enforcement and Surveillance - Vessel Monitoring System		1 297			2,000						2,000			5 400	C	0	7 400
261		Subtotal. Enforcement	169	23,588	220	196	26,295	528	0	o	786	960	28,569	o	d	7,400	220	196	35,969
262				20,000			20,200	010					20,000		Ĩ	.,			00,000
263		Partnerships in Enforcement																	
264	BSE	Enforcement and Surveillance - Cooperative Agreements w/States		14 912			14 775						14 775				C	0	14 775
265	BSF	NH Fish & Game Enforcement Vessal		14,512			250						250				0	0	250
266		Subtotal Partnerships in Enforcement	0	14 912	0	0	15 025	d	0	0	a	d	15 025	0	d	0	ď	G	15 025
267				,	Ĵ		.0,020						.0,020		Ĩ		Ĩ		.0,020
268		Total Enforcement and Surveillance Services	160	38 500	220	106	41 320	529	0	0	786	0.00	13 50/	0	0	7 400	220	106	50 994
269			103	00,000	220	100	41,020	020	·		100	500	40,004		Ŭ	7,400		100	50,554
270	ALL	Acquisition of Data	313	26,841									0	0					0
271			0.0	20,011										9					ÿ
272		Total, National Marine Fisheries Service - ORF	2 573	634.055	2 837	2,328	579,196	(38,263)	0	21	12,702	15,515	569,150	115	87	34,305	2,952	2,436	603.455
272			_,010		2,001	_,0_0	0.0,.00	(00,200)	•		,. •_	10,010	000,100		•.	0 1,000	_,00_	_,	000,100
27/		Other National Marina Eicharias Sarvice Accounts																	
275		Total National Marine Fisheries Service - PAC		62 463	0	0	37 19/	(3/ 19/		0			3 000		0	14 000	0	0	17 000
276		Total, National Marine Fisheries Service - Other	5	119 082	5	5	180 340	(34,104	0	0	(12 140	0	160 781	0	0	(40,000	5	5	120 781
277			2.578	815 599	2 842	2 3 3 3	796 720	(79.866	0	21	562	15 515	732 931	115	87	8 305	2 957	2 4 4 1	741 236
278		ORAND TOTAL NATIONAL MARINE FIGHERIES SERVICE	2,570	015,555	2,042	2,000	100,720	(13,000		2	502	15,515	752,351	113	07	0,303	2,357	2,441	771,230
270																			
280																			

280 281 Infrastructure 26,841 ALL 313 BSF 1,473 282 Build Sustainable Fisheries 420,520 380,88 (21,480 8,639 10,552 378,60 400,361 2,008 1,525 21,761 49 37 2.05 1.58 638 283 RPS **Recover Protected Species** 164,677 709 654 173,072 (11,780 3,336 4,075 168,703 11,294 691 179,997 37 758 49 149 284 SHC Sustain Healthy Coasts 22,017 120 149 25.235 (5,003 727 888 21,847 17 1.250 137 162 23,097 13

FY2003

Strategic

Plan

Team

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Climate Research

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FY 2003

President

Budget

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FY 03 PROPOSED OPERATING PLAN		FY 2001		FY 20	002	Base Role up /Terminations		FY 200 Final A	3 TB	CSRS Legislative Proposal	FY 2003 Final Base	P	FY 20 resident rogram	03 t's Bud Change		FY 2 Presi Bud
Operations, Research and Facilities	ETE	Enacted	POS	Enact	Amount	Amount	POS	ETE	Amount	Amount	Amount	POS	ETE	Amount	POS	FTF
	FIE	Aniouni	FU3	FIE	Amount	Amount	FU3	FIE	Amount	Amount	Amount	F03		Amount	FU3	FIE
limate Research														1		
Laboratories & Joint Institutes														i !		
Aeronomy Laboratory (Colorado)	32	7,696		32	6,895				256	313	7,464			d	C	3
Aeronomy Laboratory (Colorado)					1,216						1,216			d		(
Atlantic Oceanographic and Meterological Laboratory (Florida)	42	5,373	38	42	1,708				372	454	2,534			d	38	4:
Atlantic Oceanographic and Meterological Laboratory (Florida)					3,983						3,983			217		
Air Resources Laboratory (CO,ID,NC,NV,TN)	25	3,191	26	25	2,586				225	275	3,086			d	26	2
Air Resources Laboratory (CO,ID,NC,NV,TN)					861						861			d		
Climate Diagnostic Center (Colorado)	14	2,377	36	14	1,022				107	131	1,260			d	36	14
Climate Diagnostic Center (Colorado)					1,533						1,533			d		
Climate Monitoring and Diagnostic Laboratory (Colorado)	44	5,540	45	44	5,952				319	390	6,661	2	1	125	47	4
Environmental Technology Laboratory (Colorado)	1	232		1	243				17	21	281			d		
Forecast Systems Laboratory (Colorado)	1	150		1	156				9	11	176			d		
Geophysical Fluid Dynamics Laboratory (New Jersey)	61	13,384	62	61	8,538				499	610	9,647			d	62	6
Geophysical Fluid Dynamics Laboratory (New Jersey)	26				5,691						5,691			d		
Pacific Marine Environmental Laboratory (Washington)		8,100	17	26	6,392				374	457	7,223			d	17	2
Pacific Marine Environmental Laboratory (Washington)					2,131						2,131			216		
Space Environmental Center (Colorado)	1	225		1	236				17	21	274			d		
Subtotal, Laboratories & Joint Institutions	247	46,268	224	247	49,143	C		0	2,195	2,683	54,021	2	1	558	226	24
								I						1		
Oliverate & Olekel Okening Deciment														4		

31	Aeronomy Laboratory (Colorado)					1,210						1,210			ų		u	1,210
DECCEN	Atlantic Oceanographic and Meterological Laboratory (Florida)	42	5,373	38	42	1,708				372	454	2,534			C	38	42	2,534
SI	Atlantic Oceanographic and Meterological Laboratory (Florida)					3.983						3,983			217		C	4.200
DECCEN	Air Resources Laboratory (CO ID NC NV TN)	25	3 191	26	25	2 586				225	275	3.086			C	26	25	3.086
SI	Air Resources Laboratory (CO ID NC NV TN)	20	0,101		20	861				220	2.0	861			0	20	0	861
DECCEN	Climate Diagnostic Center (Colorado)	14	2 377	36	14	1 022				107	131	1 260			0	36	14	1 260
SI	Climate Diagnostic Center (Colorado)	14	2,011	00		1,522				107	101	1,200			0	00		1,200
DECCEN	Climate Magnostic Center (Colorado)	44	5 540	45	11	5 953				310	300	6,661			125	47	45	6 786
DECCEN	Climate Monitoring and Diagnostic Laboratory (Colorado)	44	5,540	40	44	5,952				318	390	0,001			123	47	40	0,780
51	Environmental Technology Laboratory (Colorado)	1	232		1	243				17	21	281			U		1	281
SI	Forecast Systems Laboratory (Colorado)	1	150		1	156				g	11	176			0		1	1/6
DECCEN	Geophysical Fluid Dynamics Laboratory (New Jersey)	61	13,384	62	61	8,538				499	610	9,647			C	62	61	9,647
SI	Geophysical Fluid Dynamics Laboratory (New Jersey)	26				5,691						5,691			C		C	5,691
DECCEN	Pacific Marine Environmental Laboratory (Washington)		8,100	17	26	6,392				374	457	7,223			C	17	26	7,223
SI	Pacific Marine Environmental Laboratory (Washington)					2,131						2,131			216		C	2,347
SI	Space Environmental Center (Colorado)	1	225		1	236				17	21	274			C		1	274
	Subtotal, Laboratories & Joint Institutions	247	46,268	224	247	49,143	a	0	0	2,195	2,683	54,021	2	1	558	226	248	54,579
	Climate & Global Change Program																	
DECCEN	Climate and Global Change - Base	101	29,698	147	101	30,392				104	127	30,623			(492	147	101	30,131
SI	Climate and Global Change - Base		37 797			39 233						39 233			(629	0	C	38.604
SI	Variability Beyond ENSO		999			1 000						1 000			(020	Ŭ	0	1 000
DECCEN	Climate Eersing Agents		990			1,000						1,000			0		0	1,000
DECCEN	Destaration to IDI for Climate Dradiation		749			1,000						1,000			0		0	1,000
DECCEN	Assolution to IKI for Climate Prediction		140			2 100						2.400			0		0	2.400
51	Accelerating Climate Models - IKI		1,990			2,100						2,100			U		U	2,100
	Subtotal, Climate & Global Change Program	101	72,235	147	101	73,725	Q	C	0	104	127	73,956		с с	(1,121	147	101	72,835
	Climate Observations & Services					0.000												
DECCEN	Climate Reference Network		2,993			3,000						3,000			C		C	3,000
DECCEN	Climate Data & Info and CLASS in PAC											C			C		C	(
SI	Climate Data & Info and CLASS in PAC		998			1,000						1,000			C		C	1,000
DECCEN	Baseline Operations	2	1,996	2	2	2,500						2,500			C	2	2	2,500
SI	Regional Assessments, Education and Outreach		0			1,750						1,750			C		C	1,750
DECCEN	Climate Change Assessments					650						650			C		C	650
SI	Weather-Climate Connection					900						900			c		C	900
DECCEN	Carbon Cycle					2,300						2,300			C		C	2,300
DECCEN	Ocean Observations/Ocean Systems	2		3	2	2,400						2,400			c	3	2	2,400
SI	Ocean Observations/Ocean Systems		239			1,100						1,100			c		C	1.100
SI	ARGO -Related Costs [considered part of ocean observations/syste	msl	4.750			7.950						7.950			d		d	7.950
SI	Climate/Weather Connections - Tropical-Extratropical Connection	· ·	,			,						(d		d	(
SI	Climate/Weather Connections Water Cycle Research																0	
DECCEN	Climate Foreing Agente														0		0	(
DECCEN	Document Climate Change														0		0	(
DECCEN	Climate Change														18.000		0	19.000
DECCEN	Subtatel Climate Observations & Services		10.076			22 550						22 550		4	18,000	3	4	10,000
	Subtotal, Climate Observations & Services		10,970	5	~	23,550	v					23,550			10,000	°	0	41,550
	Other Partnership Programs																	
DECCEN	Central CA Ozone Study		499			250	(250					C			C			C
SI	Inst. for Study of Earth, Oceans & Space (CCRC)		1,996			3,000	(3,000					C			C		C	(
SI	International Pacific Research Center (U of HI)		499			500						500			(500		C	(
DECCEN	Arctic Research Initiative (SEARCH)											C	3	2	2,000	3	2	2,000
SI	Ice Physics Research (Thayer School of Engineering)		1,247									C			C			(
	Subtotal, Other Partnership Programs	0	4,241	0	Q	3,750	(3,250	0	0	0	d	500	3	2	1,500	3	2	2,000
	Total, Climate Research	352	133,720	376	352	150,168	(3,250	0	0	2,299	2,810	152,027	8	5	18,937	384	357	170,964
	Weather & Air Quality Research	1																
1	reading with adding research														I I			

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3 4 5 6	FY2003 Strategic	FY 03 PROPOSED OPERATING PLAN		FY 2001		FY 20	002	Base Role up /Terminations	I	FY 2003 Final A1	3 ГВ	CSRS Legislative Proposal	FY 2003 Final Base	F	FY 20 Presiden Program	003 t's Bud Change		FY 20 Presid Budg	03 ent et
7 8	Plan Team	Operations, Research and Facilities	FTE	Enacted Amount	POS	Enac FTE	ted Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9 70		Laboratories & Joint Institutes																	
71	DECCEN	Aeronomy Laboratory (Colorado)	8	2,004	10	6	2,054				41	50	2,145			C	10	8	2,145
72	AST	Atlantic Oceanographic and Meterological Laboratory (Florida)	3	3,803	5	3	3,921				124	151	4,196			C	5	3	4,196
73	AST	Air Resources Laboratory (CO,ID,NC,NV,TN)	15	1,838	15	15	1,039				66	81	1,186			C	15	15	1,186
74 75	DECCEN	Climate Monitoring and Diagnostic Laboratory (Colorado)	1	165		1	1,036				10	12	1,038			c	d	1	1,038
76	AST	Environmental Technology Laboratory (Colorado)	40	6,505	42	40	5,148				288	351	5,787			C	42	40	5,787
77	DECCEN	Environmental Technology Laboratory (Colorado)					1,716						1,716			C	C	C	1,716
78 70	AST	Forecast Systems Laboratory (Colorado)	66	10,139	67	66	10,646				475	580	11,701			175	67	66	11,876
79 80	AST	National Severe Storms Laboratory (New Jersey)	46	7.228	47	46	7.552				331	404	8.287			c	47	46	8,287
81	AST	Pacific Marine Environmental Laboratory (Washington)	1	259		1	264				10	12	286			d	C	1	286
82	AST	Space Environmental Center (Colorado)	46	6,995	47	46	7,242				328	401	7,971	4	3	210	51	49	8,181
83		Subtotal, Laboratories & Joint Institutes	239	41,909	247	239	43,863	d	C	0	1,723	2,103	47,689	4	3	385	251	242	48,074
84 95		IIS Weather Research Program																	
86	AST	U.S. Weather Research Program Base (USWRP)	2	1,497	61	4	2,750			1	55	67	2,872	3	2	1,000	64	7	3,872
87	AST	Hawaii - 3-D Ceilometer in - HI					500	(500					c			c			d
88	AST	Space-Based Wind Profiler Lidar Technology *		998			1,000	C					1,000			(1,000			d
91 02	DECCEN	Air Quality Forecasting Pilot Program					3000	(3,000					0			0			C
93	AST	Energy Security Program					5000	(3,000					C			6,100		C	6,100
94		Subtotal, U.S. Weather Research Program	2	2,495	61	4	10,250	(6,500	c	1	55	67	3,872	3	2	6,100	64	7	9,972
95																			
96 07		Other Destruction December																	
97 98	AST	Other Partnership Programs Tornado Severe Storm Research					C						C	3	2	1.000	3	2	1.000
99	DECCEN	New England Air Quality Study					1,000	(1,000					C		-	0	, and the second s	0	d
100	DECCEN	New England Airshed Pollution Analysis											c			C			d
101	SI	Inst. for Study of Earth, Oceans & Space (CCRC) (AIRMAP)						3,000					3,000			(3,000			d
102	AST	STORM (U. of N. Iowa)		349			349	(349					0			C		C	C
103	DECCEN	Subtotal, Other Partnership Programs	0	349	0		1,349	1,651	c	0	a	0	3,000	3	2	(2,000	3	2	1,000
105							-						-						
106		Total, Weather & Air Quality Research	241	44,753	308	243	55,462	(4,849	C	1	1,778	2,170	54,561	10	7	4,485	318	251	59,046
107		One of the second second second second																	
100		Laboratories & Joint Institutes																	
110	SHC	Atlantic Oceanographic and Meterological Laboratory (Florida)	44	2,252	83	44	3,219				160	195	3,574			C	83	44	3,574
111	BSF	Environmental Technology Laboratory (Colorado)	3	441	4	3	445				14	17	476			C	4	3	476
112	SHC	Great Lakes Environmental Research Laboratory (Michigan)	51	4,766	51	51	4,940				377	461	5,778			C	51	51	5,778
113	AST	Great Lakes Environmental Research Laboratory (Michigan)		2,384			2,471						2,471			0	0	C C	2,471
115	BSF	Pacific Marine Environmental Laboratory (Washington)	51	1,360	51	51	1,478				188	230	1,896			d	51	51	1,896
116	SI	Pacific Marine Environmental Laboratory (Washington)		1,360			1,478						1,478			C	C	C	1,478
117	DECCEN	Pacific Marine Environmental Laboratory (Washington)		4,078			4,433						4,433			C	C	C	4,433
118 110		Subtotal, Laboratories & Joint Institutes	149	17,433	189	149	19,285	a	C	0	739	903	20,927	C		a	189	149	20,927
120		National Sea Grant College Program																	
121	BSF	National Sea Grant College Program Base (Base)	20	56,126	20	20	21,044						21,044	(20	(20	(21,044	C	C	C
122	SHC	National Sea Grant College Program Base (Base)					35,366						35,366			(35,366	C	C	C
123 124	SHC	Aquatic Nuisance Species/Zebra Mussel Research		2,993			3,000						3,000			(3,000		0	d
124	BSF	Oyster Disease Research		998 1.996			2.000						2.000			(1,000		d	d
126		Subtotal, National Sea Grant College Program	20	62,113	20	20	62,410	d	C	0	a	o	62,410	(20	(20	(62,410	Q	Q	q
127																			
128	Bee	National Undersea Research Program (NURP)		10 770			6 404				60		6 575					5	6 575
129 130	SHC	National Undersea Research Program (NURP)	3	13,770	C		7,346				00	03	7,346			C	0	0	7,346
131	SHC	National Institute for Undersea Science and Technology					2,500	(2,500					C			C			C

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P Diraction Diraction Point Manue Point	3 4 5 6	FY2003 Strategic	FY 03 PROPOSED OPERATING PLAN		FY 2001		FY 20	02	Base Role up /Terminations	F	FY 2003 Final AT	3 "B	CSRS Legislative Proposal	FY 2003 Final Base	I P	FY 20 Presiden Program	003 t's Bud Change		FY 20 Presid Budg	03 ent et
9 9 5 5.07.7 0 <td>7 8</td> <td>Plan Team</td> <td>Operations, Research and Facilities</td> <td>FTE</td> <td>Enacted Amount</td> <td>POS</td> <td>Enact FTE</td> <td>ed Amount</td> <td>Amount</td> <td>POS</td> <td>FTE</td> <td>Amount</td> <td>Amount</td> <td>Amount</td> <td>POS</td> <td>FTE</td> <td>Amount</td> <td>POS</td> <td>FTE</td> <td>Amount</td>	7 8	Plan Team	Operations, Research and Facilities	FTE	Enacted Amount	POS	Enact FTE	ed Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
30 30 000 000000000000000000000000000000000000	9 132 133		Subtotal, National Undersea Research Program (NURP)	5	13,770	8	5	16,270	(2,500	a	0	68	83	13,921		a a	a	8	5	13,921 0
Bit Data Regularity Description	134	SHC	Ocean Exploration	0	3,992	11	8	12,200			2	105	128	12,433				11	10	12,433
100 100 <td>135</td> <td>BSF</td> <td>Ocean Exploration</td> <td></td> <td></td> <td></td> <td></td> <td>500</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>500</td> <td></td> <td></td> <td>0</td> <td></td> <td>C</td> <td>500</td>	135	BSF	Ocean Exploration					500						500			0		C	500
19 Pol Deam Figuration 10 100 100 100 <th1< td=""><td>136</td><td>RPS</td><td>Ocean Exploration</td><td></td><td></td><td></td><td></td><td>400</td><td></td><td></td><td></td><td></td><td></td><td>400</td><td></td><td></td><td>0</td><td></td><td>C</td><td>400</td></th1<>	136	RPS	Ocean Exploration					400						400			0		C	400
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	137	PSN	Ocean Exploration		0.000			900				405	100	900	1		0		10	900
Other Properties Program I <td>130</td> <td></td> <td>Subtotal, Ocean Exploration</td> <td>0</td> <td>3,992</td> <td></td> <td>a</td> <td>14,000</td> <td>u</td> <td>U</td> <td>2</td> <td>105</td> <td>120</td> <td>14,233</td> <td>1 '</td> <td>1 1</td> <td></td> <td>11</td> <td>10</td> <td>14,233</td>	130		Subtotal, Ocean Exploration	0	3,992		a	14,000	u	U	2	105	120	14,233	1 '	1 1		11	10	14,233
141 BHC Argents Constructions which which and a set beaution and a	140		Other Partnership Programs																	
12 Mot Acts Resent 1.04 1.05 1.05 1.05 1.05 1.05 1.05 1.05 1.05 0.05	141	SHC	Aquatic Ecosystems - Canaan Valley Institute		4,291			4,300	(4,300					C			C	0		C
111 Biff: Chang (das how signed weight) (hym) 1 2,80 0,200 0,200 0,40<	142	SHC	Arctic Research		1,646			1,650						1,650			0		c	1,650
144 BHC Construction Convergent Phasebox types 1 2 2 C <thc< th=""> C <thc< th=""> C <thc< th=""> <thc< th=""></thc<></thc<></thc<></thc<>	143	SHC	Cultured Cobia Demonstration (VIMS)											C			C			C
10 BPC 0 of J Marc Council 0 of J 0 of J<	144	SHC	Carolina Coastal Ocean Observing and Prediction System					2,800	(2,800					C			C			C
16 BNC Hyos Beach Hyos Beach 100 <td>145</td> <td>SHC</td> <td>Gulf of Maine Council</td> <td></td> <td></td> <td></td> <td></td> <td>500</td> <td>(500</td> <td></td> <td></td> <td></td> <td></td> <td>C</td> <td></td> <td></td> <td>0</td> <td></td> <td></td> <td>C</td>	145	SHC	Gulf of Maine Council					500	(500					C			0			C
147 SHC Lake Chergin David State December 100	146	SHC	Hypoxia Research		499									C			C		C	C
Has BNC Like Congan Baye Constraint 110 2 <th2< th=""> 2 2 2 <</th2<>	147	SHC	Lake Champlain Canal Barrier Demonstration		100									C			0		C	C
abs Las Cougen React Core Number Constraint 1,98 223 (2,08) 1 1 0	148	SHC	Lake Champlain Study		150									C			C		C	0
91 91 Non-Analysing Angel (1) of Maily (1) of Ma	149	SHC	Lake Champlain Research Consortium		1.000			250	(250					0	1		0		0	0
SNC NRX (Figure & Costell Instance Spects) no. no. (L.2.0) (L.2.0) NO. NO. NO. NO. <	150	SHC	National Center for Natural Products (U. of Miss.)		1,996			2.250	(2.250						1		0		0	U C
Site Inversity Mod Inversity Mod <td>152</td> <td>SHC</td> <td>NISA/Prevent & Control Invasive Species</td> <td></td> <td>798</td> <td></td> <td></td> <td>2,230</td> <td>(2,250</td> <td></td> <td></td> <td></td> <td></td> <td>800</td> <td>1</td> <td></td> <td>0</td> <td></td> <td>0</td> <td>0 800</td>	152	SHC	NISA/Prevent & Control Invasive Species		798			2,230	(2,250					800	1		0		0	0 800
194 BSF IOM Mare Assache Program 6,43 2,50 0 12 12 12 2,62 0 0 195 BSF Concession Functions word False Assache Program 0 3,00 3,00 3,00 10	153	SHC	New Hamoshire Milfoil		150			275	(275					000	1		0		Ŭ	000
155 BSF Concent table for grand Macabas and France 0 <t< td=""><td>154</td><td>BSF</td><td>NOAA Marine Aquaculture Program</td><td></td><td>8,431</td><td></td><td></td><td>2.594</td><td>(</td><td></td><td></td><td>12</td><td>15</td><td>2.621</td><td></td><td></td><td>0</td><td></td><td>0</td><td>2.621</td></t<>	154	BSF	NOAA Marine Aquaculture Program		8,431			2.594	(12	15	2.621			0		0	2.621
BSF Agazaba Education Regime: Code Plant MS Image: Code Plant MS <	155	BSF	Cooperative Institute for New England Mariculture and Fisheries		-,			3,000	(3,000					_,			0			_,•·
BSF Polic Topical Consumer Fan. disc. di	156	BSF	Aquaculture Education Program - Cedar Point MS					1,000	(1,000					C			0			C
BSF Apacharb Magner Hum-RickWog Image Management	157	BSF	Pacific Tropical Ornamental Fish					450	(450					C			C			C
99 SHC 0 SHC 0 998 2323 0 12 12 116 15 116	158	BSF	Aquaculture Management Plan - RICRMC					1,500	(1,500					C			C			C
100 AST Tranumi stream Magnon 3,202 3,302 (3,300) 0 <td>159</td> <td>SHC</td> <td>SE Atlantic Marine Monitoring & Pred. Center (UNC)</td> <td></td> <td>998</td> <td></td> <td></td> <td>998</td> <td>(998</td> <td></td> <td></td> <td></td> <td></td> <td>C</td> <td></td> <td></td> <td>0</td> <td></td> <td>C</td> <td>C</td>	159	SHC	SE Atlantic Marine Monitoring & Pred. Center (UNC)		998			998	(998					C			0		C	C
161 Subtrain formation 0 23,056 0 25,667 (20,62) 0 12 15 5,071 0 0 0 0 0 12 15 5,071 0 0 0 0 0 12 15 5,071 0	160	AST	Tsunami Hazard Mitigation		3,293			3,300	(3,300					C			C		C	C
Internation Technology, RAD, and Science Education 174 120,355 222 182 137,633 (23,123) 92 92 92 91,125 (116,56 (20) (20	161		Subtotal, Other Partnership Programs	0	23,050	Q	0	25,667	(20,623	d	0	12	15	5,071		a a	Q	d	Q	5,071
133 104 1	162		Tatal Occurs Occurs I and Occurs I also December	474	400.259	220	400	407 600	(22.422			024	4.400	140 E00	(20	(20	(62.440	200	464	E4 453
10-1 Information Technology, R&D, and Science Education Information Technology, R&D, and Science Education (Base) Information Technology, R&D, and Science Education Information Technology, R&D, and Science Education <td>163</td> <td></td> <td>Total, Ocean, Coastal, and Great Lakes Research</td> <td>174</td> <td>120,356</td> <td>220</td> <td>102</td> <td>137,032</td> <td>(23,123</td> <td>U U</td> <td>2</td> <td>924</td> <td>1,128</td> <td>116,562</td> <td>(20</td> <td>(20</td> <td>(62,410</td> <td>200</td> <td>104</td> <td>54,152</td>	163		Total, Ocean, Coastal, and Great Lakes Research	174	120,356	220	102	137,032	(23,123	U U	2	924	1,128	116,562	(20	(20	(62,410	200	104	54,152
107 Information Technology, R&D, and Science Education (Base) 1<	165 166		Information Technology, R&D, and Science Education																	
168 ALL GLOBE <	167		Information Technology, R&D, and Science Education (Base)																	
169 ALL High Performance 2 12,722 14 7 12,800 0 <	168	DECCEN	GLOBE	5	2,993	C	0							C		C	C	C	C	C
170 Total, Information Technology, R&D, and Science Education 7 15,715 14 7 12,800 0	169	ALL	High Performance	2	12,722	14	7	12,800						12,800		0	0	14	7	12,800
171 All Acquisition of Data 121 12,92 Image: Control of Data Image: Controf Data Image: Control of Data Image	170		Total, Information Technology, R&D, and Science Education	7	15,715	14	7	12,800	0	0	0	0	C	12,800		0	0	14	7	12,800
ALL Acquisition of Data 121 12.924 Image: Constraint of Data	171																			
1/3 1/4 Total, NOAA Research - ORF 895 327,470 926 784 356,062 (31,222 0 3 5,001 6,109 335,950 (2 (8 (38,988 92 775 1/75 0 0ther NOAA Research - ORF 20 22948 (2 27,700 (16,350 0 0 0 0 (76 0<	172	ALL	Acquisition of Data	121	12,924															0
1/4 India, NOAR Research - OKP 695 327,470 926 7/6 356,002 (51,222 0 5 5,001 6,105 335,950 (2 (6 (35,966 922 7/78 175 Other NOAR Research - Accounts 0 22948 0 0 277,700 (16,350 0	173			805	207 470	0.26	704	256.062	(24, 222		2	5 004	6 400	225.050		(0	(20.000	024	770	206.063
175 0ther NOAA Research Accounts 0 22948 0	174		Total, NOAA Research - ORF	895	327,470	926	784	356,062	(31,222	U	3	5,001	6,109	335,950	(2	(8	(38,988	924	//9	296,962
177 Other NOAR Research - PAC 0 2294 0 277,0 (16,50) 0 <td>175</td> <td></td> <td>Other NOAA Research Assounts</td> <td></td>	175		Other NOAA Research Assounts																	
Instruction	170		Total NOAA Research - RAC	0	22948	0	0	27 700	(16 350	0	0	0	0	11 350			(766	0	0	10 584
ALL All Strategic Plans 123 25,646 14 7 12,800 0 0 0 0 0 0 0 0 0 0 14 7 181 183 183 191 1172 2,108 47,295 10 7 7,485 308 242 185 191 131 131 343 363 391	178		Total, NOAA Research - Other	0	22340	d	d	27,700	(10,550	0	0	d		11,330		d d	(700	0	c	10,304
180 181 181 ALL All Strategic Plans 123 25,646 14 7 12,800 14 7 183 AST Advanced Short Term Warnings and Forecast Services 232 46,669 298 234 47,609 (4,149 0 1 17,277 2,108 47,295 10 7 7,485 308 242 184 BSF Build Sustainable Fisheries 79 83,122 83 79 41,435 (5,955) 0 0 282 345 36,112 (20 (20 (24,044) 63 59 185 DECCEN Decadal to Centennial Change 337 91,833 386 35 91,992 (7,250 0 0 2,07 2,819 89,868 5 19,633 394 363 186 PSN	179		GRAND TOTAL NOAA RESEARCH	895	350,418	926	784	383,762	(47,572	0	3	5,001	6,109	347,300	(2	(8	(39,754	924	779	307,546
181 ALL All Strategic Plans 123 25,646 14 7 12,800 0 0 0 0 0 0 0 0 0 143 7 183 AST Advanced Short Term Warnings and Forecast Service; 232 46,669 298 234 47,609 (4,149) 0 1 1,727 2,108 47,295 10 7 7,485 308 242 184 BSF Build Sustainable Fisheries 79 83,122 83 79 41,435 (5,950) 0 0 282 345 36,112 (20 (20 (20,404) 63 59 185 Build Sustainable Fisheries 37 91,833 386 91,992 (7,250) 0 0 282 345 36,112 (20 (20 (20,404) 63 59 186 DECCEN Decadal to Centennial Change 37 91,833 386 91,992 (7,250) 0 0 0 0 0 0 0 0 0 0 0 0 0 <	180																			
ALL All Strategic Plans 123 25,646 14 7 12,800 0 0 0 0 0 0 0 0 0 14 7 183 AST Advanced Short Term Warnings and Forecast Services 232 46,669 298 234 47,609 (4,149 0 1 1,727 2,108 47,295 10 7 7,485 308 242 184 BSF Build Sustainable Fisheries 79 83,122 83 79 41,435 (5,950) 0 282 345 36,112 (20 (20 (24,044) 63 59 185 Deccel to Centennial Change 337 91,833 386 358 91,992 (7,250) 0 2,307 2,819 89,868 8 5 91,633 394 363 185 DECCEN Decada to Centennial Change 337 91,833 386 359 91,992 (7,250) 0 0 0 0 0 0 0 0 0 0 0 0 0 0	181																			
AST Advanced Short Term Warnings and Forecast Services 232 46,669 298 234 47,609 (4,149 0 1 1,727 2,108 47,295 10 7 7,485 308 242 184 BSF Build Sustainable Fisheries 79 83,122 83 79 41,435 (5,950 0 0 282 345 36,112 (20 (24,044) 63 59 185 DecCeN Decadal to Centennial Change 337 91,833 386 358 91,992 (7,250 0 0 2,001 89,868 8 5 19,633 394 186 PSN Promote Safe Navigation 0 0 0 900 <	182	ALL	All Strategic Plans	123	25,646	14	7	12,800	0	0	0	0	0	12,800	0	0	0	14	7	12,800
BSF Build Sustanable Fisheries 79 83,122 83 79 41,435 (5,950 0 0 282 3451 36,112 (20) (24,044) 63 59 186 DECCEN Decada to Centennial Change 33 91,833 386 358 91,992 (7,250 0 0 2,819 89,868 8 5 19,633 394 363 186 PSN Promote Safe Navigation 0	183	AST	Advanced Short Term Warnings and Forecast Services	232	46,669	298	234	47,609	(4,149)	0	1	1,727	2,108	47,295	10	7	7,485	308	242	54,780
Instruction Instruction <thinstruction< th=""> <thinstruction< th=""></thinstruction<></thinstruction<>	184	BSF	Build Sustainable Fisheries	79	83,122	83	79	41,435	(5,950)	0	0	282	345	36,112	(20	(20)	(24,044)	63	59	12,068
PSN Promote safe Navigation U <td>185</td> <td>DECCEN</td> <td>Decadal to Centennial Change</td> <td>337</td> <td>91,833</td> <td>386</td> <td>358</td> <td>91,992</td> <td>(7,250)</td> <td>0</td> <td>0</td> <td>2,307</td> <td>2,819</td> <td>89,868</td> <td>8</td> <td>5</td> <td>19,633</td> <td>394</td> <td>363</td> <td>109,501</td>	185	DECCEN	Decadal to Centennial Change	337	91,833	386	358	91,992	(7,250)	0	0	2,307	2,819	89,868	8	5	19,633	394	363	109,501
	100	PDP	Promote Sate Navigation	0	0	0	0	900	0	0	0	0	0	900	0	0	0	0	0	900
188 SHC ISustain Healthy Coasts 95 25 329 145 103 82 394 (13 873) 0 2 642 784 60 047 0 0 29 266 146 105	10/	SHC	Sustain Healthy Coasts	05	25 320	145	102	82 304	(13 972)	0	2	6/2	794	400		0	(38 366)	145	105	31 591
189 St Implement Seasonal to Intrannual Climate Forecasts 29 54.871 0 3 78.522 0 0 0 43 53 78.528 0 0 (3.6961 0 3	189	SI	Implement Seasonal to Intrannual Climate Forecasts	29	54,871	0	3	78,532	(13,513	0	0	43	53	78,628	0	0	(3,696)	0	3	74,932

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4			I					Base Role up		FY 20	03	CSRS	FY 2003		FY 2	003		FY 2	003
5	FY2003	FY 03 PROPOSED OPERATING PLAN		EV 0004		EV 00		/Terminations		Final A	ТВ	Legislative	Final Base	1 !	Presider	nt's Bud		Pres	dent
6 7	Strategic	Operations Research and Facilities	Ι.	FY 2001 Enacted		FY 20	02 od					Proposal		· ·	rogram	Change		Bud	get
8	Team	operations, Research and Facilities	FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																			
10		Operations and Research																	
11 12		Local Warnings and Forecasts																	
13		Local Warnings and Forecasts																	
14	AST	Local Warnings and Forecasts Base	4166	495,919	4,304	4,168	483,178	37,576			19,346	22,979	563,079			1,388	4,304	4,168	564,467
15	AST	Alaska Data Buoys		3,343			1,700						1,700			0		0	1,700
16	AST	New England Data Buoys					750	(750					C			0			C
17	SI	Sustain Cooperative Observer Network		399			1,890						1,890			0		0	1,890
10	AST	Coop Institute Utah - 2002 Olympics		589 499			500	(500					u d			0			u d
20	AST	Susquebanna River Basin Flood System		400			1.310	(1.310					0			0			c
21	AST	NC Flood Plain Mapping Pilot					4,000	(4,000					d			0			d
22	AST	Aviation Forecast					35,596	(35,596					d			0			d
23	AST	Kentucky Mesonet											d			0			C
24	AST	Texas Mesonet		500 540	1.00			(1.500			10.010		0			0		4.400	C
25 26		Subtotal, Local Warnings and Forecasts	4,166	500,749	4,304	4,168	528,924	(4,580	0	0	19,346	22,979	566,669	٩	0	1,388	4,304	4,168	568,057
20 27	AST	Advanced Hydrological Prediction Services		998			1.500				98	120	1 718			4 500		0	6 218
28							.,					120	.,			1,000		J	0,210
29	AST	Aviation Weather											C			2,500		0	2,500
30																			
31	AST	WFO Maintenance		4,229			4,390						4,390			3,000		0	7,390
32 33		Weather Padia Transmitters												1					
34	AST	Weather Radio Transmitters Base		2 318			2 320						2 320			0	0	0	2 320
35	AST	NOAA Weather Radio Transmitters - ME		2,010			300	(300					2,020	1		0	Ŭ	Ŭ	2,020
36	AST	NOAA Weather Radio Transmitters - Barrow, AK		100									d			0			d
37	AST	NOAA Weather Radio Transmitters - Stuben County, IN		78									d			0			d
38	AST	NOAA Weather Radio Transmitters - IL		499									d			0			c
39	AST	NOAA Weather Radio Transmitters - KY		853									d			0			c
40	AST	NOAA Weather Radio Transmitters - Mason, KY		77									d			0			C
41	AST	NOAA Weather Radio Transmitters - Melba, MS		100			000	(000					U O	1		0			0
4Z //3	AST	NOAA Weather Radio Transmitters - NH		125			230	(230					U	1		0			U C
44	AST	NOAA Weather Radio Transmitters - WY		100			374	(374					d	1		0			d
45	AST	NOAA Weather Radio Transmitters - Big Horn, WY					76	(76					d			0			d
46	AST	NOAA Weather Radio Transmitters - WI					450	(450					d			0			c
47	AST	North Dakota Ag Weather Network		269			270	(270					C			0			c
48		Subtotal, Weather Radio Transmitters		4,569	Q	0	4,370	(2,050	0	0	0	0	2,320	d	0	0	Q	0	2,320
49 50		Total Local Warnings and Faragasta	4 166	510 545	4 204	4 169	520 194	(6.620			10 444	22.000	575 007			11 200	4 204	4 169	E96 496
50 51		Total, Local warnings and Forecasts	4,100	510,545	4,304	4,100	559,164	(6,030			19,444	23,099	575,097	9	0	11,300	4,304	4,100	560,465
52	AST	Central Forecast Guidance	291	37,417	276	291	41,925				1,600	1,954	45,479			0	276	291	45,479
53																			
54 55		Total, Operations and Research	4,457	547,962	4,580	4,459	581,109	(6,630	0	0	21,044	25,053	620,576	0	0	11,388	4,580	4,459	631,964
56		Systems Operation & Maintenance (O&M)												1					
57	AST	NEXRAD	133	38,717	128	133	39,996				1,739	2,124	43,859			0	128	133	43,859
58	AST	WSR-88D					3,100	(3,100				, i i i i i i i i i i i i i i i i i i i	C			0			C
59	AST	ASOS	37	7,407	38	37	7,650				484	591	8,725			0	38	37	8,725
60	AST	ASOS - AK Aviation					4,000	(4,000					0			0			C
61	AST	AWIPS	42	35,318	11	42	36,500				549	671	37,720			0	11	42	37,720
62 63	AST	NWSTG Backup - CIP	210	81 / 40	177	211	01 246	(7 100		-	9 779	3 206	00.304		0	3,000	177	210	3,000
64		iotai, systems operation & Maintenance	212	01,442	177	212	91, ∠40	(7,100		1 "	2,112	3,386	90,304	1 9	0	3,000	177	212	93,304
65		Total, National Weather Service - ORF	4,669	629,404	4,757	4,671	672,355	(13,730)	0	0	23,816	28,439	710,880	0	0	14,388	4,757	4,671	725,268
66		Other Netland Worther Denda																	
67 68		Utner National Weather Service Accounts	F 5	63 405	55	55	70 729	(3.000			0	0	67 700		0	7 940	55	55	75 570
50		Total, readinar Weather Dervice * FAG	. 30	00,400	50	00	10,120	(3,000			0	0	01,120	4 4	0	1,040	55	- 55	15,570

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D	Α	В	Е	F	1	J	L	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB
1								NATIONAL WEA	THER	SERVIC	E								
2								(\$ IN THO	USAND	S)									
3																			
4								Base Role up		FY 20	03	CSRS	FY 2003		FY 2	003		FY 2	2003
5	FY2003	FY 03 PROPOSED OPERATING PLAN						/Terminations		Final A	TB	Legislative	Final Base		Presider	nt's Bud		Pres	ident
6	Strategic	1		FY 2001		FY 200	02					Proposal			Program	Change		Bud	get
7	Plan	Operations, Research and Facilities	E	Inacted		Enacte	ed												
8	Team		FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																			
69		Total, National Weather Service - Other	C	C			0	0	0	0	0		C	0	0	0	C	0	a
70		GRAND TOTAL NATIONAL WEATHER SERVICE	4,724	692,809	4,812	4,726	743,083	(16,730	0	0	23,816	28,439	778,608	0	0	22,236	4,812	4,726	800,844
71																			
72																			
73	AST	Advanced Short Term Warnings and Forecast Servic	4669	629,005	4,757	4,671	670,465	(13,730	0	0	23,816	28,439	708,990	0	0	14,388	4,757	4,671	723,378
74	SI	Implement Seasonal to Intrannual Climate Fored	0	399	0	0	1,890	0	0	0	0	0	1,890	0	0	0	0	0	1,890

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F	1	J	М	AR	AS	AT	AU	AV						
NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE														
				(\$ IN THOUS	ANDS)									

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3																			
4			ī –	į	Ē		- ,	Base Role up	ſ	FY 200	J <u>3</u>	CSRS	FY 2003	ſ	FY 2	.003	ſ	FY 200	.3
5	FY2003	FY 03 PROPOSED OPERATING PLAN	1	EV 2004	4	EV (/Terminations	1	Final A	тв	Legislative	Final Base	1	Presiden	it's Bud	1	Preside	nt
б 7	Plan	Operations Research and Facilities	1 /	Fracted	1	Fi 27	JUZ	1 7	1		1	Proposai	1 '	1	Program	Change	1	Buage	· 1
8	Team	operations, research and r domaio	FIE	Amount	POS	FIE	Amount	Amount	POS	FIE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9	, <u> </u>	τ	<u> </u>		<u>, </u>							l	· · · · · ·		—		, 	لي ال	
10	1 7	Environmental Satellite Observing Systems	1 1	1 1	· '	1 7	1 1	1 7	1	1 7	1 1	1 '	1 '	1 '	1 '	1 '	1 1	1 1	, I
11	AST	Satellite Command and Control	433	19,768	361	211	32,461	4/		4	976	1,192	34,629	4	/ /	2,510	361	211	37,139
12	<u> </u>	()	<u> </u>		<u> </u>	 ′	(<u> </u>	1′		· · ·	(· · · · · · · · · · · · · · · · · · ·	<u> </u>	ſ'	· ·	· '	\square'		ر
13	AST	Product Processing and Distribution		19,720	212	124	21,000	4			721	881	22,602	4	/	5,050	212	124	27,652
14	1 7	Subtotal,	433	39,488	573	335	53,461	1 0	1 0	1 0	1,697	2,073	57,231	4 0	1 0	7,560	573	335	64,791
15	1 7	1 J	1 1	1 1	1 I	1 7	1 1	1 7	1	1 7	1 7	1 '	1 7	1 '	1 '	1 7	1 1	1 1	, I
16	L	Product Development, Readiness & Application	ا ا	1	<u>ر ا</u>	1/	1	1′	· · · · · ·	 '	007	1	1	· · · ·	· · ·	1 50'	(/		10.001
17	AST	Product Development, Readiness & Application		14,193		98	14,768	1			627	/60	16,161		/	500	(<u> </u>	98	16,661
18 10	SHU	Product Development, Readiness & Application	1 /	3,991	()	1 /	4,000	1 /			/ /		4,000	1	/	1 /	1 /	(V	4,000
19	AST	Coral Reef Monitoring		1			750	4					75			2.60	4/		3 350
20	AST	Clebal Wind Dama		2 495			3 000	4					3.00/	A		(2,000	4 1	1 7	1,000
21 1	AST	Global wind Demo	17	20.679	1	a 9'	23,267	4 7	4	á 7	627	76	24.66	1 7	á /	1,10	4 - '	1 97	25,761
23	1 7	Subtotal, Froudet Development, readiness & Approvation	1 7	1 7	1 7	1 7		1 7	1 7	1 7	1	·	1	1 7	7	1	1 1	1 7	
24	AST	Commercial Remote Sensing Licensing & Enforcement		1 0			1,200	4			//		1,200	4		1	4/	1 0	1,200
25	· · · · ·	1	\square		\square	<u> </u>	('	(′		<u> </u>	<u> </u>	۱ <u> </u>	<u> </u>		'	·'	\square'	\square	·'
26	1 7	Total, Environmental Satellite Observing Systems	433	. 60,167	573	43?	3 77,929	^^	·۲	J (2,324	2,839	83,092	4 <u> </u>	J(8,660	573	433	91,752
27	1 7	í F			<u> </u>		,,	· · · · ·		· · · ·	· · · ·	· · · · ·	·,		· · · ·	,,		\frown	, <u> </u>
28	1 7	1	1 1	1 1	· '	1 7	1 1	1 7	1	1 7	1 1	1 '	1 '	1 '	1 '	1 '	1 1	1 1	, I
29	1 7	NOAA's Data Centers & Information Services	1 1	1 1	e 1	1 7	1 1	1 7	1	1 7	1 1	1 '	1 '	1 '	1 '	1 '	1 1	1 1	, I
30 31	s	Archive, Access & Assessment	256	24 945	277	25	26.250	4/			2 199	2.68(31.13/		· · · · · ·	5 44	277	256	36 577
37	SI	Archive, Access & Assessment /Climate Database Modernization	200	15,665	4 ² '''	2004	15,850	4 /			2,104	2,000	15.85		/	(9.636	4	(~~ J	6.214
32	DECCEN	Archive Access & Accessment		499			500	4					50			(0,)			500
34	DECCEN	Center for Spatial Data Research & Application	1	2,494	1	1 7	1 7	1					1 7		/	1 7	A /	1	d
35	SI	GOES Data Archive Project		1			2,000	(2,000					ج	4		<u>م</u>	4 7		
36	(Subtotal, Archive, Access & Assessment	256	43,603	277	256	44,600	(2,000	A r	o r	2,199	2,68€	47,485	a r	ა <i>ძ</i>	J (4,194	277	256	43,291
37	1/	()	1/	1/	<u>، '</u> '	1 '	1	1′	1	1_′	1/	1'	1'	1	1'	1	1'	1 _]	·!
38	SI	Coastal Data Development	1 7	5,987	<u> </u>	4 7	4,513	4 7			/ /		4,51?	4	/ /	1 0	4 /	1 0	4,513
39	í/	()	<u> </u>	()	<u> '</u>	('	('	1′	í '	ſ′	[/	·'	ſ'	ſ'	· · ·	· · · · · · · · · · · · · · · · · · ·	<u> </u>	í J	. !
40	SI	Regional Climate Centers		2,894		(3,000	(3,000			/ /		0	4	· · · ·	0	<u>ر ا</u>	(– 7	d
41	1	()	I/	1	<u> </u>	 '	1	۱ ′	· · · · ·	 '	<u>ا ا</u>	<u>ا</u> ــــــــــــــــــــــــــــــــــــ	1	 '	 '	1/	<u>ا ا</u>	<u>ر</u>	10.001
42	SI	Environmental Data Systems Modernization	/ · · · ·	12,30a			12,335	1 /			((12,335	1	· · · · ·	1 9	(1 9	12,335
43	1 7	L		64.705	<u> </u>	4	<u></u>	(5.00)	<u>.</u>	<u></u>	2 100	2.6%	<u> </u>	<u>'</u>	بسط	4 10/	H	255	£0.120
44	1 7	fotal, NOAA's Data Centers & Information Services	200	64,/94	<u> </u>	236	64,440	(0,000	—	4	2,193	2,000	64,333	—	4	(4,134	- 211	230	60,133
40	1 7	Total Nat'l Environmental Satellite, Data and Information Servi	685	124,959	850	685	142,377	(5.000	d ,	<i>'</i> ہ اہ	4.523	5.525	147.42		'ہ اہ	4.46F	850	689	151,891
47	1 7	Total, Nat i Environmental Gatemic, Bata and methalist.	1	1	1	1		1	1	1 7		-,,	1	1 7	1 7	1	1	1 7	101,00
48	1 7	Other Nat'l Environmental Satellite, Data and Information Service Accounts	1 1	1 1	1 P	1 7	1 1	1 7	1	1 7	1 1	1 '	1 '	1 '	1 '	1 '	1 1	1 1	, I
49	1 7	Total, National Environmental Satellite, Data and Information Service - PAC	100	514,999	80	ر 100	561,926	۲ ۲)	ა ი	ď	659	562,585	9 C	J (. 50,250	. 80	100	612,835
50	<u>'</u> '	Total, National Environmental Satellite, Data and Information Service - Other	0	40	0	4	40	0	<u> </u>	<u>, o</u>		0	40	0	<u> </u>	40	0	<u> </u>	0
51	<i>'</i>	GRAND TOTAL NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMA	789	639,958	930	789	704,303	(5,000	°	<u> </u>	4,523	6,184	710,010	O	<u> </u>	54,716	930	789	764,726
52																			
53																			
54 55	TPA	Advanced Chart Term Warnings and Enrocast Services	435	56 176	572	43	73 170			1	2 32/	2 83/	78 34			8 66/	57'	437	87.002
56	BSF	Advanced Short Term Warnings and Forecast Services		A C			A	7		_	2,52	2,000	10,044			A (<u></u>		07,004
50	DECCEN	Decedal to Centennial Change	7	2.993	<u> </u>		500	7	d i i i i i i i i i i i i i i i i i i i	7	1 7		50/		7	/7	7	$ \longrightarrow $	500
37 P		Seeddar to Gernerhinar entange			چھے													<u> </u>	

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4	EV2002		ла Ле				Base Role up		FY 200	3 TP	CSRS	FY 2003		FY	2003		FY 20	003 Iont	
5	Strategic	FT 03 PROPOSED OPERATING PLAN	F	Y 2001		FY 200	12	/Terminations		Final A	в	Proposal	Final base		Presia Progra	ents Bud m Change		Bude	ient iet
7	Plan	Operations, Research and Facilities		nacted		Enacte	ed .					rioposai			rogra	in onlange		Duuş	,01
8	Team	- F ,	FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																			
10		Corporate Services																	
11		Under Secretary and Associate Offices																	
12	ALL	Under Secretary and Associate Offices Base	225	19,858	240	232	21,823	1,059			364	445	23,691		C	2,146	240	232	25,837
10	ALL	National Academy of Sciences Oceanographic Study		740									0			u d			u d
14		Subtotal Under Secretary and Associate Offices	225	21.354	240	232	21 823	1.059	0	0	364	445	23 691	a	0	2 146	240	232	25 837
16				21,001		0_	,0_0	1,000		, i			20,001			_,			20,000
17		Policy Formulation and Direction																	
18	ALL	Policy Formulation and Direction Base	699	33,769	814	701	35,000	(739			(277	(338	33,646		C	1,354	814	701	35,000
19	ALL	Business Management Fund Initial Capitalization											d			d		C	C
20	ALL	Educational Partnership Program/Minority Serving Institutions (EPPMSI)		14,967			15,000						15,000			C	C		15,000
21	ALL	IT Security		C			C						C	11	8	4,000	11	8	4,000
22		Subtotal, Policy Formulation and Direction	699	48,736	814	701	50,000	(739	0	0	(277	(338	48,646	11	8	5,354	825	709	54,000
23																			
24		Total, Corporate Services	924	70,090	1,054	933	71,823	320	0	0	87	107	72,337	11	8	7,500	1,065	941	79,837
25		Facilities																	
20 27	AL 1	NOAA Maintenenee Densite and Safety	6	1 966		6	2 225				410	500	4 125			2 700		G	6 926
28	AST	Boulder Facilities Operations	U	3 991	8	C	4 500				410	500	4,135			2,700	8	0	4 500
29	ALL	Western Regional Center Operations & Maintenance		0,001			1,000				C		0			702		C	702
30	ALL	Columbia River Facilities (Moved to NMFS)		3,358			3,365	(3,365					d			C		c	C
31		Total, NOAA Maintenance, Repairs and Safety	6	9,215	9	6	11,090	(3,365	0	0	410	500	8,635	C	0	3,402	9	6	12,037
32																			
33	ALL	Environmental Compliance	9	1,996	6	9	2,000						2,000			0	6	9	2,000
34																			
35		Project Planning and Execution																	
36	ALL	Energy Management		0			0.000						0			550		U C	550
38	SHC	Priblof Islands Cleanup		C	0	0	6,000	0	0	0	0	0	6,000	0	0	4,000		0	10,000
39		Total, Project Planning and Execution	, u	,	U	ų	0,000			0	U	ų	0,000		ų	4,550			10,550
40		Total, Facilities	15	11,211	15	15	19,090	(3,365	0	0	410	500	16,635	a	C	7,952	15	15	24,587
41																			
42		Marine Operations & Maintenance																	
43																			
44		Marine Services																	
45	ALL	Marine Services (Data Acquisition)			404	407	40.044				070	0.14	0	15	16	815	15	16	815
40 //7	SHC	Marine Services (Data Acquisition)			70	60	6 185				279	341	6 185			(1	70	137	6 18/
/R	BSE	Marine Services (Data Acquisition)			287	261	24 146				552	674	25 372			(1	287	261	25 372
49	SI	Marine Services (Data Acquisition)			63	60	5,670				234	286	6,190			C	63	60	6,190
50	DECCEN	Marine Services (Data Acquisition)			63	61	5,970						5,970			d	63	61	5,970
51	RPS	Marine Services (Data Acquisition)			56	51	8,614						8,614			d	56	51	8,614
52		Subtotal, Marine Services Base	C	C	700	639	63,829	a	0	0	1,065	1,301	66,195	15	16	815	715	655	67,010
53	SHC	AGATE PASS (Coastal YTT) Operations											d	2	2	350	2	2	350
54	PSN	FAIRWEATHER Operations											C	60	62	4,100	60	62	4,100
55	DECCEN	UNOLS (Days at Sea - West Coast)											0			2,500		C	2,500
56 57		Subtotal, Marine Services (including base)	Q	Q	700	639	63,829	a	0	0	1,065	1,301	66,195	77	80	7,765	777	719	73,960
୦/ 58	PSN	Fleet Planning and Maintenance		2 207			2 225						2 225					C	2 225
50	SHC	Fleet Planning and Maintenance		2,307			2,335	(13					2,335			0		C	2,333
60	BSF	Fleet Planning and Maintenance	3	4,174	12	3	4,225	(13			93	114	4 445			0	12	3	4,445
61	SI	Fleet Planning and Maintenance	Ŭ	988	.2	,	1,000	10			50		1,000			d		d	1,000
62	DECCEN	Fleet Planning and Maintenance		988			1,000						1,000			C		C	1,000
63	RPS	Fleet Planning and Maintenance		1,427			1,445						1,445			C		C	1,445
64	SHC	AGATE PASS (Coastal YTT) Maintenance											C			250		C	250
65	PSN	FAIRWEATHER Maintenance											C			450		C	450
66		Subtotal, Fleet Planning and Maintenance	3	10,986	12	3	11,120	0	0	0	93	114	11,327	0	0	700	12	3	12,027
69 69		Iotal, Marine Operations and Maintenance	3	10,986	712	642	74,949	0	0	0	1,158	1,415	77,522	77	80	8,465	789	722	85,987
00	I		1	I I					I	I I	I I			ı l					

F 1 2 3	A	В	E	F	I	J	Μ	AR PROGRAM S (\$ IN THOUS	AS UPPORT Sands)	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC
4 5 6	FY2003 Strategic	FY 03 PROPOSED OPERATING PLAN		FY 2001		FY 20	02	Base Role up /Terminations		FY 200 Final A	03 TB	CSRS Legislative Proposal	FY 2003 Final Base		FY Presid Progra	2003 ent's Bud n Change		FY 20 Presid Budg	003 lent get
7	Plan	Operations, Research and Facilities	⁶	Enacted	DOC	Enacte	ed	A	DOC		A	Amount	A	DOC		A	DOC		A
o a	ream		FIE	Amount	PUS	FIE	Amount	Amount	P05	FIE	Amount	Amount	Amount	PUS	FIE	Amount	PUS	FIE	Amount
69		Aviation Operations																	ł
70	AST	Aircraft Services	89	11.783	114	91	11,139			1	509	622	12.270			(500	114	92	11,770
71	DECCEN	Aircraft Services					2,125						2,125			(C	2,125
72	PSN	Aircraft Services					1,420						1,420			d		C	1,420
73	AST	Aircraft Services											C			500		C	500
74	DECCEN	Aircraft Services											C			1,000		C	1,000
75		Total, Aircraft Services	89	11,783	114	91	14,684	0	C	1	509	622	15,815	0	0	1,000	114	92	16,815
76																			
77	ALL	Leg. Proposal NOAA Corps Officer Retirement (part of the CSRS proposal)										5,970	5,970				C	C	5,970
78																			
79		Total, Marine Operations & Maintenance and Aviation Operations	92	22,769	826	733	89,633	0	C	1	1,667	8,007	99,307	77	80	9,465	903	814	108,772
80 81		Total, Program Support - ORF	1,031	104,070	1,895	1,681	180,546	(3,045	c	1	2,164	8,614	188,279	88	88	24,917	1,983	1,770	213,196
82 83		Other Program Support Accounts																	
84		Total, Program Support - PAC	35	39,535	35	35	62,427	(39,900	C	0	d	d	22,527	C	c	56,053	35	35	78,580
85		Total, Program Support - Other	C	15,366	0	C	16,186		C	0	d	20,469	36,655	C	C	Q	C	C	36,655
86		GRAND TOTAL PROGRAM SUPPORT	1,066	158,971	1,930	1,716	259,159	(42,945	0	1	2,164	29,083	247,461	88	88	80,970	2,018	1,805	328,431
87																			
88	ALL	All Strategic Plans	939	77,310	1,069	948	80,413	(3,045	C	0	497	6,577	84,442	26	24	12,267	1,095	972	96,709
89	AST	Advanced Short Term Warnings and Forecast Services	89	15,774	114	91	15,639	0		1	509	622	16,770		0	0	114	92	16,770
90	BSF	Build Sustainable Fisheries	3	4,174	299	264	28,371	13		0	645	788	29,817		0	Q	299	264	29,817
91	DECCEN	Decadal to Centennial Change	0	988	63	61	9,095	0		0	0	0	9,095		0	3,500	63	61	12,595
92	PSN	Promote Safe Navigation	C	2,307	161	137	16,999	d		0	279	341	17,619	60	62	4,551	221	199	22,170
93	RPS	Recover Protected Species	0	1,427	56	51	10,059	0		0	a	C	10,059		0	C	56	51	10,059
94	SHC	Sustain Healthy Coasts	0	1,102	70	69	13,300	(13	0	0	0	0	13,287	2	2	4,599	72	71	17,886
95	SI	Implement Seasonal to Intrannual Climate Forecasts	0	988	63	60	6,670	0		0	234	286	7,190		0	Q	63	60	7,190
96																			
98			1,031	104,070	1,895	1,681	180,546	(3,045)		1	2,164	8,614	188,279		88	24,917	1,983	1,770	213,196
99																			
100			0	0	0	0	0	0		0	0	0	0		0	0	0	0	0
101	Note: FY 2	003 NOAA Corp retirement changes for the legislative propo	sal totals	\$\$17,655 which	l I														
102	whi	ch includes \$1,000 in Mandatory for Health under 65, \$1,000	in Reimb	oursable for								2644							

103

DoD payment for Health care over 65, \$15,655 in NOAA Corp Retirement Fund for payments to all retirees reflect the restructuring required for full accural. 104

FY03 PROPOSED OPERATING PLAN (FINAL).123

н	В	С	D	G	н	J	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA
1							ORF Summary											
2					LINE A	ND STAFF	OFFICE DIRECT C	BLIGA	TIONS									
3						(\$	in Thousands)											
4																		
5							Base Role up		FY 20	03	CSRS	FY 2003		FY 200	3		FY 200	13
6	FY 03 PROPOSED OPERATING PLAN						/Terminations		Final A	АТВ	Legislative	Final Base	Pr	esident's	s Bud		Preside	ent
7		F	Y 2001		FY 200	2					Proposal		Pro	ogram C	hange		Budge	et
8	Operations, Research and Facilities	E	nacted		Enacte	d												
9		FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
10																	í I	
11	National Ocean Service	1,405	390,141	1,181	1,222	413,911	(51,748	C	5	5,596	6,835	374,594	8	6	10,753	1,189	1,233	385,347
12																	1	
13	National Marine Fisheries Service	2,573	634,055	2,837	2,328	579,196	(38,263	C	21	12,702	15,515	569,150	115	87	34,305	2,952	2,436	603,455
14																	1	
15	NOAA Research	895	327,470	926	784	356,062	(31,222	C	3	5,001	6,109	335,950	(2	(8	(38,988	924	779	296,962
16																	1	
17	National Weather Service	4,669	629,404	4,757	4,671	672,355	(13,730	C	0	23,816	28,439	710,880	c	0	14,388	4,757	4,671	725,268
18																	1	
19	National Environ. Sat. Data & Info Service	689	124,959	850	689	142,377	(5,000	C	0	4,523	5,525	147,425	C	0	4,466	850	689	151,891
20																	1	
21	Program Support	1,031	104,070	1,895	1,681	180,546	(3,045	C	1	2,164	8,614	188,279	88	88	24,917	1,983	1,770	213,196
24																	1	
25	Subtotal Line & Staff Office Direct Obligations, ORF	11.262	2.210.099	12.446	11.375	2.344.447	(143.008	C	30	53.802	71.037	2.326.278	209	173	49.841	12.655	11.578	2.376.119

I	В	С	D	G	н	к	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB
1 2 3 4							ORF ADJUSTMEN (\$ in Thousands	ITS										
5 6 7	FY 03 PROPOSED OPERATING PLAN	F	Y 2001		FY 20	02	Base Role up /Terminations		FY 20 Final /	03 ATB	CSRS Legislative Proposal	FY 2003 Final Base	Pi Pr	FY 20 resident ogram (03 's Bud Change		FY 2003 Presider Budget	ıt
8	Operations, Research and Facilities		Amount	POS	Enacte	Amount	Amount	POS	FTF	Amount	Amount	Amount	POS	ETE	Amount	POS	ETE	Amount
10		FIE	Amount	FU3	FIE	Amount	Amount	F03	FIE	Amount	Amount	Amount	F03	FIE	Amount	FU3	FIE	Amount
11	Subtotal Line & Staff Office Direct Obligations. ORF	11.262	2.210.099	12.446	11.375	2.344.447	(143.008	C	30	53.802	71.037	2.326.278	209	173	49.841	12.655	11.578	2.376.119
12	······································		, ,,,,,													1		11 -
13	FINANCING																	
14	De-Obligations		(16,613			-17000						-17000					0	(17,000
15	GSA		(75															
16	Additional Adjustments ("financing from" in Congress):																	
17	Undistributed ATB for CSRS Legislative Proposal																	C
18	Domestic Travel		(3,991														0	C
19	Foreign Travel		(2,398														0	C
20	General Office Supplies		(4,989														0	C
21	Non-Maritime/Con-Capitalized Equipment		(2,993														0	C
22	Subtotal ORF Adjustments		(31,059	a	C	(17,000	0		c	0		(17,000	d	0	d	c	0	(17,000
23																		
24	TOTAL DISCRETIONARY ORF BUDGET AUTHORITY	11,262	2,179,040	12,446	11,375	2,327,447	(143,008)	C	30	53,802	71,037	2,309,278	209	173	49,841	12,655	11,578	2,359,119
25																		
26	Transfers:																	
27	GSA		75															
28	Promote & Develop American Fisheries		(68,000			(68,000				(7,000		(75,000					0	(75,000
29	Coastal Zone Management Fund		C			(3,000						(3,000					0	(3,000
30	Coastal & Ocean Activities Transfer		(165,500			C						d					0	C
31	Transfer from USDA		(20,000			0						d					0	C
32	Subtotal ORF Transfers	a	(253,425	a	a	(71,000	0	0		(7,000	. a	(78,000	a	0	d	C	0	(78,000
33																		
34	TOTAL CJS ORF APPROPRIATION	11.262	1.925.615	12,446	11.375	2.256.447	(143.008	0	30	46,802	71.037	2.231.278	209	173	49.841	12.655	11.578	2.281.119

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3 4								Base Role up		FY 20	003	CSRS	FY 2003		FY 2	003		FY 20	03
5	FY2003	FY 03 PROPOSED OPERATING PLAN		EV 2001		EV 2	002	/Terminations		Final	АТВ	Legislative	Final Base	Pro	esiden	t's Bud		Presid	ent
7	Plan	Procurement, Acquisition and Construction	I	Enacted		Enac	ted					Floposal		FIC	gram	Change		Бийу	el
8 9	Team		FIE	Amount	POS	FIE	Amount	Amount	POS	FIE	Amount	Amount	Amount	POS	FIE	Amount	POS	FIE	Amount
10		NOS																	
12		Systems Acquisition																	
13		Construction																	
14	0110	Coastal and Estuarine Land Conservation Program		1 005															
15 16	SHC	Orange County, CA - Land Acquisition (COA) Brook River NY		1,995			1 500	(1.500								u d		u c	u d
17	SHC	East River South Bronx NY					1,000	(1,000					0			d		c	c
18	SHC	Lake Superior, City of Superior WI					800	(800					C			C		C	C
19	SHC	Elkhorn Slough					500	(500					C			C		C	C
20	SHC	Hackensack Watershed Study					1,200	(1,200					C			C		C	C
21	SHC	Kitsap County WA					500	(500					C			C		0	C
22	SHC	Village Point AL					500	(500					0			0		0	0
23	SHC	Videwater Peninsula, VA					223	(225								u d		U C	u d
24	SHC	Hampstead Harbor, NY					350	(350					0			d		c	c
26	SHC	Lake Ontario, NY					350	(350					C			C		C	C
27	SHC	Detroit River - Wyandott/Chrysler, MI					1,000	(1,000					C			C		C	C
28	SHC	NY/NJ Partnership					1,500	(1,500					C			C		C	C
29	SHC	Warwick RI					350	(350					C			C		C	C
30	SHC	Worcester City, MD					350	(350					C			C		C	C
31	SHC	Orange County, CA -Land Acquisition (COA)					350	(350					C			C		0	C
32	SHC	Stamford Mill, CT					350	(350					0			U C		U C	U C
34	SHC	Sall Paulo bay, CA Manchester by the Sea-Gloucester, MA					350	(350					0			c c		0	c c
35	SHC	Camp Salmen, LA					225	(225					0			c		c	c
36	SHC	Deer Island, MS					3,800	(3,800					C			C		C	C
37		Subtotal, Coastal and Estuarine Land Conservation Program	0	1,995	0	o	15,825	(15,825	0	C	C	a a	0	Q	C	C	C	d	C
38		NERRS Acquisition/Construction:																	
39	SHC	NERRS Construction and Land Acquisition (COA)		30,936									C			C		C	C
40	SHC	ACE Basin					13,500	(13,500					C			C		0	C
41	SHC	Great Bay Partnership (COA)		2,993			6,000	(6,000					0			0		0	0
42 13	SHC	National Estuarine Research Reserve Construction & Land Acquisition		6,984			8,412	(10 500					8,412			1,600		0	10,012
43		Subtotal, NERRS Acquisition/Construction	0	40,913		, v	21,912	(19,500	U	L L		1 1	0,412	, v	ų	1,000	ų	v	10,012
45		Marine Sanctuaries Construction:																	
46	SHC	Marine Sanctuaries Construction Base		2,993									0			10,000		C	10,000
47	SHC	Florida Keys National Marine Sanctuary					6,500	(6,500					0			C		C	C
48	SHC	Humpback Whale National Marine Sanctuary					1,500	(1,500					C			C		C	C
49	SHC	National Monitor Sanctuaries					5,000	(5,000					C			C		C	C
50	SHC	Monterey Bay National Marine Sanctuary					1,250	(1,250					C			C		C	C
51	SHC	Stellwagen Bank National Marine Sanctuary Grave Roof Sanctuary					500	(500					0			u d		u c	u d
52 53	300	Subtotal Marine Sanctuary Construction	0	2 993	0		14 750	(14 750	0				0	0	0	10.000	0	0	10.000
54		Subtotal, Marine Sanctuary Construction	0	2,335		ŭ	14,750	(14,750		1		1 1		Ŭ	ŭ	10,000	Ŭ	ų	10,000
55		Other NOS Facilities:																	
56	SHC	Kachemack Bay Service Facility					800	(800					C			C		C	C
57	SHC	Kasitsna Bay Laboratory					5,500	(5,500					C			C		C	C
58	SHC	Marine Environmental Health Research Laboratory Enhancement & Equip					14,000	(14,000					C			C		C	C
59 60	SHC	Beaufort Lab Repairs					5,000	(5,000					0			C		C	C
6U 61	SHC	Coastal Service Center					4,000	(4,000					0			C		C	C
62	SHC	Eally Beach Seabrook Tract (SC)		1 996												C C		0	L C
63	SHC	Pribilof Island Cleanup		5,987									0			c c		0	c c
64	0.10	Subtotal, Other NOS Facilities	0	7,983	0	d	29,300	(29,300	0	d	C	a a	0	Q	d	d	d	d	0
65				.,				(,500							2				٦
66		Subtotal, NOS Construction	0	53,884	0	0	87,787	(79,375	0	C	0	0	8,412	0	0	11,600	0	0	20,012
67			-		<u> </u>			/==	-										
69		IOTAI NUS - PAU	0	53,884	0	0	87,787	(79,375)	U	9	C C	1 "	8,412	0	0	11,600	U	Q	20,012

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3								Base Role up		FY 2	003	CSRS	FY 2003	_	FY 2	003		FY 20	03
5 6	FY2003 Strategic	FY 03 PROPOSED OPERATING PLAN		FY 2001		FY 2	002	/Terminations		Final	АТВ	Legislative Proposal	Final Base	P Pr	residen ogram	it's Bud Change		Presid Budg	ent et
7 8	Plan Team	Procurement, Acquisition and Construction	FTE	Enacted Amount	POS	Enac FTE	cted Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9 70	ļ	NMES																	
71		Systems Acquisition																	
72 73		Construction																	
74	BSF	Alaska Facilities Fisheries Center Juneau		14,967			21,100	(21,100					C			C		C	C
75	BSF	Aquatic Resources		4,989			5,000	(5,000					C			C		C	C
76 77	BSF	Botanical Gardens East Kentucky Pride - Aquatic Res Environ Initiative (COA)		3,492			4,034	(4,034								0		C C	0
78	BSF	East Kentucky Pride - Design & Construction (COA)		10,976									0			G		d	G
79	BSF	Honolulu					3,000						3,000			12,000		C	15,000
80	BSF	National Marine Life Center		798				(550					0			C		C	d
81 82	BSF	Santa Cruz Facility Sea Life Center		3.991			550	(550					(с с		C C	u c
83	BSF	Sea Life Center (COA)		9,978									C			d		C	d
84	BSF	Kodiak Pier					2,000	(2,000					C			C		C	C
85	BSF	Ketchikan Facilities					1,500	(1,500					0			0		C	0
86 87	KP5	Phase III - Galveston Laboratory Renovation - NMFS Subtotal NMES Construction	-	54,180	0	0	37.184	(34.184		0		0	3.000		0	2,000		0	2,000
88				01,100			0,,10	(01)101	, in the second se					,					
89		Fleet Replacement																	
90	BSF	Fisheries Research Vessel Replacement		8,282			d						C			C			C
91			_																
92 93		Subtotal, NMFS Fleet Replacement		8,282	U				U U	U	, i		L L		U U	U			0
94		Total, NMFS - PAC	0	62,462	0	0	37,184	(34,184	0	0	C	0	3,000	0	0	14,000		C	17,000
95						i i													
96		OAR																	
97	DEOOFN	Systems Acquisition		4.005			0.000						0.000					0	0.000
98	DECCEN	Comprehensive Large Array Data Stewardship System		1,995			3,600	(350					3,600			u o		U	3,600
100	DECCEN	Research Supercomputing		3.991			7,750	(000)					7.750			(766		c	6.984
101		Subtotal, OAR Systems Acquisition	0	5,986	0	0	11,700	(350	0	0	(d	11,350	0	0	(766		0	10,584
102																			
103		Construction					10.000	(10.000										á	
104	SHC	Norman Consolidation Project		2,993			16,000	(16,000					(0		0	0
105	0110	Subtotal. OAR Construction	0	16,962	0	0	16.000	(16.000	0	0	C	d	0		C	d	d	G	q
107								(,											
108		Total, OAR - PAC	0	22,948	0	0	27,700	(16,350	0	0	C	d d	11,350	C	0	(766	C	C	10,584
109		ADAG																	
110		Systems Acquisition																	
112	AST	ASOS		3,846			5,125						5,125			C		C	5,125
113	AST	AWIPS	55	16,264	55	55	16,264						16,264			C	55	55	16,264
114	AST	Evansville Doppler Radar		5,488 8 261			8 260						(8 260			C		C	0 8 260
116	AST	NWS WFO Huntsville		0,201			3,000	(3,000					0,200			d		, c	0,200
117	AST	NWSTG Backup - CIP		4.000			7,460						7,460			(7,460		C	0
118 119	AST	Radiosonde Network Replacement Weather and Climate Supercomputing		4,989			4,989						4,989			2,000		c c	6,989 21,160
120	AST	Weather and Climate Supercomuting Back-up					,									7,148			7,148
121		Subtotal, NWS Systems Acquisition	55	53,900	55	55	60,098	(3,000	0	0	0	0	57,098	0	0	7,848	55	55	64,946
122		Construction				I													
123	AST	WEO Construction		0.505			10.620						10.620					0	10 620
125	7.01	Subtotal, NWS Construction	0	9,505	0	0	10,630	C	0	d	C	a	10,630	0	d	d	d	0	10,630
126				2,200		Ĭ		¥					,000						,
127		Total, NWS - PAC	55	63,405	55	55	70,728	(3,000	0	0	0	0	67,728	0	0	7,848	55	55	75,576
128		NEODIO				I													
129 130		Systems Acauisition																	

1 2							PROCURE	MENT, ACQUISIT (\$ IN THOU)	JSANDS	D COI 5)	NSTRUCTION	N							
3 4 5	FY2003	FY 03 PROPOSED OPERATING PLAN						Base Role up /Terminations		FY 2 Final	003 ATB	CSRS Legislative	FY 2003 Final Base	Pi	FY 2 resider	003 it's Bud		FY 20 Presid	03 ent
6 7	Strategic Plan	Procurement, Acquisition and Construction		FY 2001 Enacted		FY 2 Enad	002 sted					Proposal		Pr	ogram	Change		Budg	et
8	Team	reconcilient, requisition and construction	FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9 131	AST	Geostationary Systems	50	290,184	35	50	262,474						262,474			(35,076	35	50	227,398
132	AST	Polar Orbiting Systems	50	209,848	45	50	295,902					659	296,561			63,636	45	50	360,197
133 134	AST	EOS & Advanced Polar Data Processing, Distributio& A rchiving Systems CIP - single point of failure											C C			3,000		0	3,000 2,800
135	AST	Coastal Remote Sensing											Q			6,000		Q	6,000
136		Subtotal, NESDIS Systems Acquisition	100	500,032	80	100	558,376	0	(0 0	0	659	559,035	0	0	40,360	80	100	599,395
137		Construction																	
139	AST	Satellite CDA Facility		0			3,550						3,550			1,000		C	4,550
140 141	AST	Suitland Facility Subtotal NESDIS Construction	0	14,967	0		3 550	0		0 0	d		3 550	0	0	8,890 9,890	0	0	8,890 13 440
142				,			0,000						0,000		,	0,000			,
143 144		Total, NESDIS - PAC	100	514,999	80	100	561,926	a	(0	a	659	562,585	C	Q	50,250	80	100	612,835
145		PS/Corporate Services																	
146		Systems Acquisition																	
147 148	ALL	CAMS Subtotal. PS/Corporate Services Systems Acquisition	35	19,779 19,779	35	35	17,127	d		0	0		17,127		o	(1,006	35 35	35 35	16,121 16,121
149							,						,.=			(1)			
150		PS/OMAO																	
151	AST	G-IV Instrumentation Upgrades											d			8,400		0	8,400
153		Subtotal, PS/OMAO Systems Acquisition	0	0	0	C	C	٥	(0 0	0	a d	Q	0	0	8,400	0	0	8,400
154 155		PS/OMAO														8,400	C		
156		Construction																	
157	ALL	Facilities for FAIRWEATHER, FIRST FRV, ADVENTUROUS, KA'IMIMOANA											C			C		C	C
158 159		Subtotal, PS/OMAO Construction	0	0	0	C	a	Q	(a 0	Q	a a	d	Q	a	a	Q	Q	a
160		PS/OMAO																	
161		Fleet Replacement																	
162 163	RPS	ADVENTUROUS Refurbishment		7,982			4.200	(4.200					C			G		0	d
164	BSF	ALBATROSS IV Repairs		0			3,000	(3,000					Q			C		0	d
165	PSN	FAIRWEATHER Refurbishment		6,785			10,500	(10,500					d			C		C	C
167	BSF	T-AGOS Vessel Conversion					1,100	(5,000) (1,100)					0			C			C
168	RPS	T-AGOS Vessel Conversion					2,300	(2,300					d			C			d
169	SHC	T-AGOS Vessel Conversion		0			2,600	(2,600					d			C			d
170	PSN	GORDON GUNTER Upgrade Naval Surplus Vessels (YTT)		4,989			3,500	(1,500					0			0		0	C C
172	BSF	Fisheries Research Vessel Replacement #2					5,400	(1)					5,400			45,474			50,874
173	PSN	Hydrographic Equipment Upgrades					6,200	(6,200					d			0			0
174	PSN	Subtotal, OMAO Fleet Replacement	0	19,756	0	0	45,300	(39,900	(0 0	a	a a	5,400	0	0	48,659	C	0	3,185 54,059
176																			
177		Total, PS - PAC	35	39,535	35	35	62,427	(39,900	(0 0	Q	a a	22,527	Q	Q	56,053	35	35	78,580
179		Undistributed ATB's and FTE's *								1									
180																			
181 182		Subtotal Line & Staff Office Direct Obligations, PAC	190	757,233	170	190	847,752	(172,809)	. (u O	0	659	675,602	0	0	138,985	170	190	814,587
183		Total Construction	0	149,498	C	0	155,151	(129,559)) (0 0	0) 0	25,592	0	0	35,490	0	0	61,082
184		Total System Acquisition	190	579,697	170	190	647,301	(3,350)) (0 0	0) 659	644,610	0	0	54,836	170	190	699,446
186		Total PAC	0 190	28,038 757,233	170	190	45,300 847,752	(39,900) (172,809)) () () D ()	0) 0 0 659	5,400 675,602	0	0	48,659 138,985	0 170	0 190	54,059 814,587
187																			
188	ALL	All Strategic Plans Advanced Short Term Warnings and Forecast Services	35	19,779	35	35	648,654	(19.000)	0		0	659	17,127 630,313	0	0	(1,006)	35	35	16,121 693,811

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J 1 2	A	В	E	F	I	J	L PROCURE	AQ MENT, ACQUISIT (\$ IN THO	AR ION ANI ISANDS	AS COI	AT NSTRUCTIO	AU N	AV	AW	AX	AY	AZ	BA	BB
3								Baso Polo un		, EV 2	003	CSPS	EV 2003		EV 2	003		EV 20	12
4 5	FY2003	FY 03 PROPOSED OPERATING PLAN						/Terminations		Final	ATB	Legislative	Final Base	P	resider	it's Bud		Presid	ent
6 7	Strategic	Procurement Acquisition and Construction		FY 2001 Enacted		FY 2 Enac	002 ted					Proposal		Pr	ogram	Change		Budg	et
8	Team	rissurennen, Acquisition and Construction	FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9	505			00.400		-	10.101	(00 70 ()		_			0.400						05 05
190	BSF	Build Sustainable Fisheries	0	62,462	0	0	48,184	(39,784)	0	0	0	0	8,400	0	0	5/,4/4	0	0	65,874
191	DECCEN	Decadal to Centennial Change	0	3,900	0	0	25,200	(300)	0	0	0	0	11,330	0	0	2,234	0	0	13,304
192	PON	Promote Safe Navigation	0	7.092	0	0	25,200	(25,200	0	0	0	0	0	0	0	3,160	0	0	3,180
193	SHC	Sustain Healthy Coasts	0	67 853	0	0	90 387	(8,500	0	0	0	0	8 412	0	0	2,000	0	0	2,000
194	0.10	oustain noutry obusts	, v	07,000	v	U	30,307	(01,313	v	U U		, v	0,412	v		11,000	v	v	20,01

K 1 2 3	В	С	F	G	J PAC	AP GENERAL ADJUST (\$ IN THOU	AQ MENTS SANDS	AR & FINA	AS NCING	AT	AU	AV	AW	AX	AY	AZ	BA
4 5 6 7	FY 03 PROPOSED OPERATING PLAN Procurement, Acquisition and Construction	FY 2001 Enacted		FY 200 Enacte	12 d	Base Role up /Terminations		FY 200 Final A	03 \TB	CSRS Legislative Proposal	FY 2003 Final Base	F	FY 2 Preside Progran	2003 nt's Bud n Change		FY 20 Presid Budg	103 lent let
8		Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9 10	Subtotal Line & Staff Office Direct Obligations, PAC	757,233	170	190	847,752	(172,809	(0	0	659	675,602	(138,985	170	190	814,587
11 12	FINANCING																
13 14 15	Cash Refunds																
15 16 17	De-Obligations	(7,487			-3200						-3200					0	(3,200)
18 19 20	Unobligated Balance Start of Year Unobligated Balance End of Year																
21	TOTAL DISCRETIONARY PAC BUDGET AUTHORITY	749,746	170	190	844,552	(172,809)	0	0	0	659	672,402	0	0	138,985	170	190	811,387
22 23 24	Transfers from GSA				-8000				8000		0						
24 25 26	Coastal & Ocean Activities Transfer	(68,500)															
27	TOTAL C.IS PAC APPROPRIATION	681,246	170	190	836.552	(172,809)	0	0	8.000	659	672,402	0	0	138,985	170	190	811.387

Е	1	J	М	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD

NOAA GRAND TOTAL SUMMARY

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2	Total Other Discretiona	ary Appropriati	ions														
3	(\$ IN THOUS	ANDS)															
4																	
5	· · · · · · · · · · · · · · · · · · ·		<u> </u>			Base Bala un		EV 2	002	CODO	EV 2002		EV 2	002		EV 2002	
6		1 1	1		ļ	Base Role up	I		JU3	CSRS	FY 2003		12 FT سمارا میں	003 Ma Dud	1	FY 2003	
6	FY 03 PROPOSED OPERATING PLAN	EV 2001	1	EV 2007	, 1	/Terminations	1	Finai	AIB	Proposal	Final base		residen	r's Bud Change	1	Presiden	.τ
o q	1 1	Enacted	1	F1 2002	, 1	1 1	I			Proposai	1		logram	Change	1	Duuger	
10	11	Endotod	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
11																	
12	Operations, Research and Facilities	1,925,615	12,446	11,375	2,256,447	(143,008)	0	30	46,802	71,037	2,231,278	209	173	49,841	12,655	11,578	2,281,119
13	L	1	i			1	1							i			
14	Procurement and Acquisition	681,246	170	190	836,552	(172,809)	1		8,000	659	672,402		0	138,985	170	190	811,387
15	1	1!	, I	, I		i J	1			1 1	1 1			1 1			
16	Coastal Assistance Fund	-330	, I	0	0	0	1		0	1 1	0		0	0	1	0	0
17	Coastal Zone Management Fund	3,193	, I	0	3,000	0	1		0	1 1	3,000		0	0	1	0	3,000
18	North Pacific Marine Research Institute	1 1	, I	, I	. /	1 1	1		1	1 1	1			0	1	0	0
19	Fisherman's Contingency Fund	950	1	1	952	0	1	1 1	2	1 1	954		0	0	1	1	954
20	Foreign Fishing Observer Fund	153	, I	0	191	0	1		0	1 1	191		0	0	1	0	191
21	Fisheries Financing Program	1,285	, I	0	287	0	1		(344)	1 1	(57)		0	0	1	0	(57)
22	Pacific Coastal Salmon Fund	73,758	, I	0	157,419	(7,419)	1		0	1 1	150,000		0	(40,000)	1	0	110,000
23	Coastal and Ocean Activity	420,000	, I	0	0	0	1		0	1 1	0		0	0	1	0	0
24	()		لــــــــــــــــــــــــــــــــــــــ		/		لــــــــــــــــــــــــــــــــــــــ			i I	<u> </u>						
25	NOAA Grand Total Discretionary Appropriations	3,105,870	12,617	11,566	3,254,848	(323,236)	0	30	54,460	71,696	3,057,768	209	173	148,826	12,826	11,769	3,206,594

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J L AQ AR OTHER ACCOUNTS (DISCRETIONARY) (\$ IN THOUSANDS) Е F I J L AT AU AV AW AX BB AR AS AY AZ BA

3																			
4								Base Role up			FY 2003 CSRS			FY 2003			FY 2003		
5	FY2003	FY 03 PROPOSED OPERATING PLAN						/Terminations	Final ATB			Legislative Final Base		e President's Bud			President		
6	Strategic		FY 2001			FY 20	02					Proposal		Program Change			Budget		
7	Plan	Other Accounts		Enacted		Enact	ed												
8	Team		FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																			
10		NOS																	
12	SHC	Coastal Impact Assistance Fund Obligations		149 670									0			C		0	C
13	0110	Coastal Impact Assistance Fund Budget Authority_DISCRETIONARY_(NOS)		149,670									0			0		d	C
14		Coastal Impact Assistance Fund Appropriation		(330									d			d		d	d
15				(-
16	SHC	Coastal Zone Management Fund Obligations		3,193									d			C		C	C
17		Coastal Zone Management Fund Budget Authority DISCRETIONARY (NOS)		3,193									d			d		C	C
18		Coastal Zone Management Fund Appropriation		3,193			3,000						3,000			C		d	3,000
19																			
20		Total, NOS Other Accounts Discretionary Direct Obligations		152,863	C	0	C	d	C	0	d	C	a	0	Q	Q	0	C	Q
21		Total, NOS Other Accounts Discretionary Budget Authority		152,863	C	0	Q	a	C	0	q	C	a	0	Q	Q	0	Q	Q
22		Total, NOS Other Accounts Discretionary Appropriation		2,863	C	0	3,000	a	C	0	a	C	3,000	0	a	Q	0	Q	3,000
23																			
25		NMFS																	
26																			
27	BSF	North Pacific Marine Research Inistitute	(0		0							C			C		C	C
28		North Pacific Marine Research Inistitute	(0		0							0			C		Q	C
29		North Pacific Marine Research Inistitute	(Ű							ŭ			ú		ú	U
30	BSE	Fisharman's Contingancy Fund Obligations		950	1	1	952				3		95/			C	1	1	95/
32	DOI	Fishermen's Contingency Fund Budget Authority		950	1	1	952				2		954			d	1	1	954
33		Fishermen's Contingency Fund Appropriations		950	1	1	952				2		954			d	1	. 1	954
34		The second generation of the representations					002				-					0			
35	BSF	Foreign Fishing Observer Fund Obligations		153			191						191			d		C	191
36		Foreign Fishing Observer Fund Budget Authority (NMFS)		153			191						191			C		d	191
37		Foreign Fishing Observer Fund Appropriation		153			191						191			C		d	191
38																			
39	BSF	Fisheries Financing Program Obligations		1,285			287				(344		(57			C		C	(57
40		(Base)		685			187				(187		C			C		C	C
41		(IFQ Entry Level		600			100				(157		(57			C		C	(57
42		Fisheries Financing Program Budget Authority (NMFS)		1,285			287				(344		(57			u u		u u	(57
43		Fisheries Financing Program Appropriation		1,285			287				(344		(57			C		C	(57
44 45	DOE	Press la sed Davalas Estadas Obligations														0		0	0
40	DOF	Promote and Develop Fisheries Obligations		(68,000			(68.000				(7.000		(75.000			U		U C	(75.000
40		Promote and Develop Fisheries Budget Authonity DISCRE HOWART (NWFS)		(08,000			(08,000				(7,000		(75,000			U		0	(75,000
47 ΛΩ		Promote and Develop Pisitelies Appropriation											0					Ŭ	U
40	RPS	Pacific Coastal Salmon Funds		89.803			110.000						110.000			(20.000		0	90.000
50		(Pacific Coastal Salmon Recovery)		89,803			110,000						110,000			(20,000		0	90.000
51		(··· · · ·········////////////////////	1	,000			,500						,000			(,500		Ŭ	11,500
52		Pacific Salmon Treaty		19,956			47,419						40,000			(20,000		d	20,000
53	RPS	(Northern Fund)		9,978			20,000						20,000			(10,000		C	10,000
54	RPS	(Southern Fund)		9,978			20,000						20,000			(10,000		d	10,000
55	RPS	(Washington State Buyback)					5,419	(5,419					C			C			C
56	RPS	(Pacific Salmon Commission)					2,000	(2,000					d			C			C
57																			
58	RPS	Pacific Coastal Salmon Fund Obligations		109,758			157,419	(7,419					150,000			(40,000		C	110,000
59		Pacific Coastal Salmon Fund Budget Authority (NMFS)		109,758			157,419						150,000			(40,000		C	110,000
60		Pacific Coastal Salmon Fund Budget Appropriation		73,758			157,419	(7,419					150,000			(40,000		C	110,000
61			-				450.075	/=	-	<u> </u>	10.10		454 000	-		(40.000			444.000
02		Total, NMES Other Accounts Discretionary Direct Obligations	-	112,146		1	158,849	(7,419			(342	0	151,088	0	0	(40,000	1		111,088
63 64		Total, NMFS Other Accounts Discretionary Budget Authority	-	44,146			90,849	(7,419			(7,342		/6,088	0	0	(40,000	1]	30,088
04 65		I otal, NWFS Other Accounts Discretionary Appropriation	-	/0,140	1		100,649	(7,419			(342	L L	151,088	0		(40,000	1	1	111,088
66		604	1																
67		Coastal & Ocean Activity Obligations		0				d					0					d	C
68		Coastal & Ocean Activity Budget Authority						d					d					d	d
69		Coastal & Ocean Activity Appropriation		420,000				d					d					C	d

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F I J L AQ AR OTHER ACCOUNTS (DISCRETIONARY) (\$ IN THOUSANDS) Е AR AS AT AU AV AW AX AY AZ BA BB

4	F)/0000						Base Role up FY 2003			03	CSRS	FY 2003	FY 2003			FY 2003			
5	FY2003	FY 03 PROPOSED OPERATING PLAN		TV 2001	4 EX 2002		000	/Terminations		Final	AIB	Legislative	Final Base	President's Bud		President			
6 7	Dian	Other Associate		FT 2001		FT 2002						Fioposai		Program Change			Budget		
0	Toom	Other Accounts	· '	Amount	DOC	Enaci	Amount	Amount			A	A	500 FTF 4		A			A	
0	Team			Amount	P03		Amount	Amount	P03	FIE	Amount	Amount	Amount	P03		Amount	P03		Amount
70	1																		
70				265.000			450.040	/7 440			(242		454.000			(40.000			444.000
70		TOTAL, OTHER ACCOUNTS DISCRETIONARY DIRECT OBLIGATIONS		265,009			156,649	(7,419			(342		151,060	0	U 0	(40,000			111,066
12		TOTAL, OTHER ACCOUNTS DISCRETIONARY BUDGET AUTHORITY	1	197,009	1	1	90,849	(7,419		, i	(7,342	U	76,088	U	U	(40,000	1	1	36,088
73		TOTAL, CJS OTHER ACCOUNTS DISCRETIONARY APPROPRIATION	1	499,009	1	1	161,849	(7,419	(0	(342	0	154,088	0	0	(40,000	1	1	114,088
74																			
75	BSF	Build Sustainable Fisheries	1	2,388	1	1	1,430	0	0	0	(342)	0	1,088	0	0	0	1	1	1,088
76	RPS	Recover Protected Species	0	109,758	0	0	157,419	(7,419)	0	0	0	0	150,000	0	0	(40,000)	0	0	110,000
77	SHC	Sustain Healthy Coasts	0	152,863	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78																			
79				265,009	1	1	158,849	(7,419)	0	0	(342)	0	151,088	0	0	(40,000)	1	1	111,088

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SUMMAR	Y OF DISCRE	TIONARY	RESOU	RCES		

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3																	
4						Base Role up	FY 2003		CSRS	FY 2003	FY 2003			FY 2003			
5	FY 03 PROPOSED OPERATING PLAN			r			rminations Final ATB			Legislative	F	resider	nt's Bud	President			
6		FY 2001		FY 2002						Proposal		P	rogram	Change		Budget	
7	All Accounts - Discretionary	Enacted		Enacted													
8		Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																	
10	DIRECT OBLIGATIONS																
11		0.040.000	10.110	44.075	0.044.447	(4.40.000)			50.000	74 007	0.000.070	000	470	10.044	40.055	44 570	0.070.440
12	ORF Direct Obligations	2,210,099	12,446	11,375	2,344,447	(143,008)	0	30	53,802	/1,03/	2,326,278	209	173	49,841	12,655	11,578	2,376,119
13	PAC Direct Obligations	757,233	170	190	847,752	(172,809)	0	0	(0.40)	659	675,602	0	0	138,985	170	190	814,587
14	OTHER Direct Obligations	265,009	1	1	158,849	(7,419)	0	0	(342)	0	151,088	0	0	(40,000)	1	1	111,088
15	TOTAL Direct Obligations	3,232,341	12,617	11,566	3,351,048	(323,236)	0	30	53,460	71,696	3,152,968	209	1/3	148,826	12,826	11,769	3,301,794
16																	
17	DISCRETIONARY BUDGET AUTHORITY																
18																	
19	ORF Discretionary Budget Authority	2,179,040	12,446	11,375	2,327,447	(143,008)	0	30	53,802	71,037	2,309,278	209	173	49,841	12,655	11,578	2,359,119
20	PAC Discretionary Budget Authority	749,746	170	190	844,552	(172,809)	0	0	0	659	672,402	0	0	138,985	170	190	811,387
21	OTHER Discretionary Budget Authority	197,009	1	1	90,849	(7,419	0	0	(7,342)	0	76,088	0	0	(40,000)	1	1	36,088
22	TOTAL Discretionary Budget Authority	3,125,795	12,617	11,566	3,262,848	(323,236	0	30	46,460	71,696	3,057,768	209	173	148,826	12,826	11,769	3,206,594
23																	
24	CJS APPROPRIATIONS																
25																	
26	ORF CJS Appropriations	1,925,615	12,446	11,375	2,256,447	(143,008)	0	30	46,802	71,037	2,231,278	209	173	49,841	12,655	11,578	2,281,119
27	PAC CJS Appropriations	681,246	170	190	836,552	(172,809)	0	0	8,000	659	672,402	0	0	138,985	170	190	811,387
28	OTHER CJS Appropriations	499,009	1	1	161,849	(7,419	0	0	(342)	0	154,088	0	0	(40,000)	1	1	114,088
29	TOTAL CJS Appropriations	3,105,870	12,617	11,566	3,254,848	(323,236)	0	30	54,460	71,696	3,057,768	209	173	148,826	12,826	11,769	3,206,594
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E F I J L AQ AR AS AT AU AV AW AX AY AZ BA BB OTHER ACCOUNTS (MANDATORY) (\$ IN THOUSANDS)

3								Base Role up		FY 20	03	CSRS	FY 2003		FY 20	03		FY 20	003
5	FY2003	FY 03 PROPOSED OPERATING PLAN						/Terminations		Final A	ATB	Legislative	Final Base	P	residen	's Bud		Presic	lent
6	Strategic			FY 2001		FY 2	2002					Proposal		P	rogram	Change		Budg	get
7	Plan	Other Accounts		Enacted		Enac	cted												
8	Team		FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																			
10		NOS																	
12	SHC	Coastal Zone Management Fund Obligations		0									0					C	C
13	0110	Coastal Zone Management Fund Budget Authority MANDATORY (NOS)		(3.200			(3.000						(3.000			0		d	(3.000
14		Coastal Zone Management Fund Appropriation		0			(0,000						(0,000			C		d	(0,000
15																			
16	SHC	Environmental Improve & Restoration Fund Obligations (NOS)		0			10,364				(4,796		5,568			0		C	5,568
17		Environmental Improve & Restoration Fund Budget Authority MANDATORY (NOS)		0			10,364				(4,796		5,568			C		d	5,568
18		Environmental Improve & Restoration Fund Appropriation (NOS)		0									0			C		C	C
19																			
20	SHC	Damage Assessment and Restoration Revolving Fund Obligations (NOS)	15		15	15							0				15	15	
21	SHC	Damage Assessment and Restoration Revolving Fund MANDATORY (NOS)	15		15	15							0				15	15	
22	380	Damage Assessment and Restoration Revolving Fund Appropriation (NOS)											0						
23		Total NOS Other Accounts Mandatory Direct Obligations	15	0	15	15	10 364	0			(4 796	0	5 568		0		15	15	5 568
25		Total, NOS Other Accounts Mandatory Budget Authority	15	(3.200	15	15	7.364	0		o o	(4,796	0	2,568	ď	0	0	15	15	2,568
26		Total, NOS Other Accounts Mandatory Appropriation	d	0	0	a a	G	0		o o	C	0	0	a	0	0	d	a	C
27																			
28																			
29		NMFS																	
30																			
31	BSF	Promote and Develop Fisheries Obligations	4	4,828	4	4	11,127				(7,000		4,127			C	4	4	4,127
32		Promote and Develop Fisheries Budget Authority MANDATORY (NMFS)	0	72,828	0	0	79,127						79,127			C	C	d	79,127
33		Promote and Develop Fisheries Appropriation	a	0		C							0			C		C	C
35	BSE	Environmental Improve & Restoration Fund Obligations (NMES)		2 108			10 364				(4 798		5 566			0		0	5 566
36	201	Environmental Improve & Restoration Fund Budget Authority MANDATORY (NMES)		2,100			10,364				(4,798		5,566			0		d	5,566
37		Environmental Improve & Restoration Fund Appropriation (NMFS)		0			,				(.,		0			0		d	0
38				-									-						_
39		Total, NMFS Other Accounts Mandatory Direct Obligations	4	6,936	4	4	21,491	0		0	(11,798	0	9,693	0	0	0	4	4	9,693
40		Total, NMFS Other Accounts Mandatory Budget Authority	0	74,936	0	0	89,491	0	(0	(4,798	0	84,693	0	0	0	C	0	84,693
41		Total, NMFS Other Accounts Mandatory Appropriation	0	0	0	0	C	0		0	C	0	0	0	0	0	C	C	C
42																			
43																			
44		PROGRAM SUPPORT																	
46	ALL	NOAA Corp Commissioned Officers Retirement Fund Obligations										35 655	35,655						35,655
47	,	NOAA Corp Commissioned Officers Retirement Fund Budget Authority MANDATORY (PS)										35,655	35,655						35,655
48		NOAA Corp Commissioned Officers Retirement Fund Budget Appropriation MANDATORY (PS																	
49																			
50	ALL	NOAA Corp Commissioned Officers Retirement Obligations		15,366			16,186				C	(15,186	1,000					C	1,000
51		NOAA Corp Commissioned Officers Retirement Budget Authority MANDATORY (PS)		15,366			16,186				C	(15,186	1,000					C	1,000
52		NOAA Corp Commissioned Officers Retirement Budget Appropriation MANDATORY (PS)																	
53							40.01			<u> </u>	(40.50)	00.100	F4 - 44		<u> </u>			4.4	54.67
04 55		Total, Line & Statt Office Other Accounts Mandatory Direct Obligations	19	22,302	19	19	48,041	0			(16,594	20,469	51,916		0	0	19	19	51,916
56		Total, Line & Staff Office Other Accounts Mandatory Budget Authority	15	<u>٥</u> ۲,102 ۵	15	10	113,041	0			(9 ,594 n	20,469	123,916		0		15	15	123,916 n
57				0				0			1	0	0					ų	y
58	ALL	All Strategic Plans	0	15,366	0	0	16,186	0	(0	0	20,469	36,655	0	0	0	0	0	36,655
59	BSF	Build Sustainable Fisheries	4	6,936	4	4	21,491	0		0	(11,798)	0	9,693	0	0	0	4	4	9,693
60	SHC	Sustain Healthy Coasts	15	(3,200)	15	15	10,364	0	(0	(4,796)	0	5,568	0	0	0	15	15	5,568

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н AP Е 1 Κ AQ AR AS AT AU AV AW AX AY ΑZ BA NOAA GRAND TOTAL SUMMARY (\$ IN THOUSANDS)

3						· · · · ·											
4						Base Role up		FY 200)3	CSRS	FY 2003		FY 20	03		FY 2003	1
5	FY 03 PROPOSED OPERATING PLAN					/Terminations	I	Final A	тв	Legislative	Final Base	P	resident	's Bud		Presider	it
6		FY 2001		FY 200	2					Proposal		Pr	ogram (Change		Budget	
7	Grand Totals	Enacted		Enacte	d												
8			POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FIE	Amount	POS	FIE	Amount
9			10.000			(000.000				00.405							
10	GRAND TOTAL Obligations (Mandatory & Discretionary)	3,254,643	12,636	11,585	3,399,089	(323,236	0	30	30,800	92,165	3,204,884	209	173	148,826	12,845	11,788	3,353,710
12	GRAND TOTAL Budget Authority (Mondatory & Dispertionary)	3 212 807	12 632	11 581	3 375 880	(323.236	0	30	36.866	02 165	3 181 68/	200	173	148 826	12 8/1	11 78/	3 330 510
13	GRAND TOTAL Budget Autionity (Manualory & Discretionary)	5,212,037	12,002	11,501	3,575,005	(525,250)	0	50	30,000	32,103	3,101,004	203	173	140,020	12,041	11,704	3,330,310
14	GRAND TOTAL CJS NOAA APPROPRIATION (Mandatory & Discretionary)	3.105.870	12.617	11.566	3.254.848	(323.236	0	30	54,460	71.696	3.057.768	209	173	148.826	12.826	11.769	3.206.594
15																	.,,
16	REIMBURSABLES	204,400			204,400				0	1,000	205,400		d	0		a	205,400
17																	
18	Reimbursable Obligations:																
19	Offsetting Collections (fish fees / IFQ CDQ)	4,000			4,000				0		4,000						4,000
20	Legislative CSRS proposal								0	5,565	5,565						5,565
21	New offsetting collection (Data sales)	3,600			3,600				0		3,600						3,600
22	TOTAL REIMBURSABLE Obligations	212,000	1,149	1,149	212,000		(31	(31	0	6,565	218,565		C	0	1,115	1,115	218,565
23																	
24	Reimbursable Financing:									(0.505)	(151005)						(154005)
25	Federal funds	(147,700			(147,700				0	(6,565)	(154,265)					0	(154,265)
26	Non-federal funds	(56,700			(56,700				0		(56,700)					0	(56,700)
27	Offset for Fee Collections (FY 2000 Magnuson Fees)	(4,000			(4,000				0		(4,000)					0	(4,000)
28	Offsetting Collection (data sales)	(3,600			(3,600				0		(3,600)					0	(3,600)
29	TOTAL REIMBURSABLE Financing	(212,000			(212,000				0	(6,565	(218,565		C	0		C	(218,565)
30																	

29 30 31

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Note: \$1000 increase reflects DoD payment for health care benefits for retired officers
over 65 pursuant to DoD FY 2002 Authorization bill

34

12,734

13,960 12,903

\$5565 increase reflects increased reimbursable costs associated with labor on

36 reimbursable projects.

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Е F 1 J L AQ AR AS AT AU AV AW AX AY ΑZ BA BB LINE OFFICE SUMMARY (\$ IN THOUSANDS)

3 FY 2003 FY 2003 FY 2003 FY 2003 4 Base Role up CSRS FY 03 PROPOSED OPERATING PLAN 5 /Terminations Final ATB Legislative Final Base President's Bud President 6 FY 2001 FY 2002 Proposal Program Change Budget Line Office Summary 7 Fnacted Fnacted 8 FTE Amount POS FTE Amount POS FTE POS FIF POS FIF Amount Amount Amount Amount Amount Amount 9 10 ational Ocean Service 11 ORF 1,405 390,14 1,181 1,222 413,91 (51,748 5,596 6,835 374,59 10,753 1,189 1,233 385,34 12 53.88 20.01 PAC 87.78 (79.37 8.41 11.60 13 OTHER 152,86 10,36 (4,796 5.56 5,56 14 TOTAL, NOS 1,420 596.888 1,196 1,237 512,06 (131,123 800 6,835 388,57 22,353 1,204 1,248 410,927 15 16 ational Marine Fisheries Service 17 2.573 634.055 2.837 2.328 579.196 (38.263 12,702 15.515 569.150 87 2.436 603.455 ORF 2 115 34.305 2.952 18 PAC 62,462 37,18 (34,184 3,00 14,00 17,00 19 119.08 180.34 (7 41)(12.14) 160 78 (40.00 120.78 OTHER TOTAL. NMFS 2.578 815.599 2.333 (79.866 562 15.515 732.93 741.236 2.842 796.720 115 87 8.305 2.957 2.441 20 21 21 22 ceanic and Atmospheric Research 23 296,96 ORF 895 327,470 926 784 356,062 (31,222 5,001 6,109 335.95 (2 (8 (38,988 924 779 24 PAC 22.94 27,70 (16,350 11.35 (766 10,58 25 OTHER 895 350,418 784 383,762 (47,572 5,001 6,109 347,300 (39,754 307,546 26 TOTAL, OAR 926 (2 (8 924 779 27 28 lational Weather Service 29 ORF 4,669 629,404 4,757 4,67 672,35 (13,730 23,816 28,439 710,88 14,38 4,757 4,671 725,26 30 PAC 55 63,405 5 5 70,72 (3,000 67,72 7,84 5 55 75,57 31 OTHER 32 TOTAL, NWS 4.724 692.809 4.812 4.726 743.083 (16.730 23.81 28.439 778.608 22.23 4.812 4.726 800.844 33 34 tional Environmental Satellite, Data and Information Service 35 ORE 689 124 959 850 689 142.37 (5.00 4.523 5.525 147 42 4 4 6 850 689 151 89 36 PAC 100 514,99 80 100 561,92 659 562,58 50,25 80 100 612,83 37 OTHER 38 TOTAL, NESDIS 789 639,958 930 789 704,303 (5,000 4,523 6,184 710,01 54,71 930 789 764,726 39 40 rogram Support/Corporate Services 41 ORF 924 70,090 1,054 933 71,82 32 107 72,33 7,50 1,065 941 79,83 35 35 35 16,121 42 PAC 19 77 35 17.12 17.12 (1,006 35 43 OTHER TOTAL, PS/Corporate Services 88.950 44 959 89.869 1.089 968 320 87 107 89.464 6.494 1.100 976 95.958 45 rogram Support/Facilities 46 (3,365 11,211 19,090 410 500 16 635 7,952 15 24,587 47 ORE 15 15 15 15 48 PAC 49 OTHER (3,365 16,635 11,211 19,09 410 500 7,952 24,587 50 TOTAL, PS/Facilities 15 15 15 15 15 51 52 Program Support/Office of Marine & Aviation Operations 53 ORF 92 22,769 826 733 89,63 1,667 8,007 99,30 80 9,465 903 814 108,772 54 PAC 19,75 45,30 (39,900 5,40 57,05 62,459 55 OTHER 15.36 16 18 20.46 36 65 36 655 56 57,891 151,11 (39,900 1,667 28,476 141,36 66,52 TOTAL, PS/OMAO 826 733 80 903 814 207,886 57 58 Total PS ORF 1,031 104.07 1,895 1.68 180.54 (3.045 2.164 8,614 188.27 88 24.91 1,983 1.770 213.196 59 Total PS PAC 39.535 62.42 (39,900 22.52 78.58 35 35 35 56,053 35 35 60 Total PS Other 15.36 16.186 20.469 36.65 36.655 61 62 TOTAL, PS 1,066 158.971 1,930 1,716 259,159 (42,945 2,164 29,083 247,461 80,970 2,018 1,805 328,431 89 88 63 64 ALL OBLIGATIONS 65 ORF 11,262 2,210,099 12,446 11,375 2,344,44 (143,008 53,802 71,037 2,326,27 173 49,84 11,578 2,376,119 209 12,655 (172,809 66 138,98 814,587 PAC 190 757,233 17 190 847,75 659 675.60 17 190 67 OTHER 287.31 206.89 (7.41 (16.936 203.00 (40.000 163.00 TOTAL, ALL OBLIGATIONS 11.472 3,254,643 12,636 11.585 3.399.08 (323,23 36,86 71.696 3,204,88 210 173 148,82 12,845 11.788 3.353.71 68

Q 1 2 3	В	E	F	I	J	L	AQ LINE OFFICE SU (\$ IN THOUSA	AR Immary NDS)	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB
4							Base Role up		FY 20	03	CSRS	FY 2003		FY 200	3		FY 200	3
5	FY 03 PROPOSED OPERATING PLAN						/Terminations		Final A	ТВ	Legislative	Final Base	F	President's	Bud		Preside	nt
6			FY 2001		FY 2002	2					Proposal		P	rogram C	hange		Budge	t
7	Line Office Summary		Enacted		Enacted	1												
8		FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																		
69																		
70																		
71	Subtotal, PAC Adjustments		(7,487	Q	0	(3,200	C	0	c	a a	0	(3,200	0	0	0	Q	0	(3,200
72	Subtotal, PAC Transfer		(68,500	Q	0	(8,000	C	0	C	8,000		0						
73	Subtotal, ORF Adjustments		(31,059	Q	0	(17,000	C	0	C	a a	0	(17,000	0	0	0	0	0	(17,000
74	Subtotal, ORF Transfers		(253,425	Q	0	(71,000	C	0	C	(7,000	0	(78,000	0	0	0	0	0	(78,000
75	Subtotal, Other Account Tranfers		234,000	a	a	a												
76	Subtotal, OTHER Mandatory		(22,302	(19	(19	(45,041	C	0	c	16,594	(20,469	(48,916	0	0	0	(4	(4	(48,916
77																		
78	TOTAL, ALL APPROPRIATIONS (Less Adjustments and Transfers)	11,472	3,105,870	12,617	11,566	3,254,848	(323,236	0	30	54,460	51,227	3,057,768	210	173	148,826	12,841	11,784	3,206,594

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Е F 1 J L AQ AR AS AT AU AV AW AX AY ΑZ BA BB SP SUMMARY BY TEAM (\$ IN THOUSANDS)

3 FY 2003 FY 2003 FY 2003 4 Base Role up CSRS FY 2003 FY 03 PROPOSED OPERATING PLAN 5 /Terminations Final ATB Legislative Final Base President's Bud President FY 2001 FY 2002 6 Proposal Program Change Budget Strategic Plan Goal Summary 7 Fnacted Fnacted 8 FTE Amount POS FTE Amount Amount POS FTE Amount Amount Amount POS FTF POS FIF Amount Amount 9 10 **Operations and Research Funds** 11 12 5.423 747.62 806.89 (17.87 34.00 851.39 881.93 Advanced Short-Term Warnings and Forecasts Services 5.742 5.429 28.37 30.53 5.752 5.438 13 nplement Seasonal to Interannual Climate Forecasts Service 285 118,05 340 319 151,040 (5,000 2,476 3,025 151,54 (7,890 340 319 143,65 337 14 redict and Assess Decadal to Centennial Change 95,81 449 419 101,58 (7,250 2,307 2,819 99,46 23,133 457 424 122,596 741 2.836 3.464 130.66 831 145.250 829 116.66 762 138.05 (13.69 14 58 809 15 romote Safe Navigation 6 1,555 507.816 2,390 1,868 460.626 (27.417 9.566 11.685 454.460 29 (2,283 2,419 1,906 452.177 16 Build Sustainable Fisheries 21 17 638 765 713 186.531 (11.780 3.336 4.075 182.162 49 37 11.294 750 193.456 17 ecover Protected Species 166.104 814 18 Sustain Healthy Coasts 820 328,226 936 910 406,504 (56,944 4,408 5,384 359,352 1 15 (31,802 955 931 327,550 1375 26 19 129797 1083 955 93,213 (3,045 497 6.577 97,242 24 12.267 1,109 979 109.509 nfrastructure 20 2.210.099 2.344.447 (143.008) 53.802 71.037 2.326.278 209 173 49.841 12.655 11.578 2.376.119 21 Total, ORF Strategic Plan Goal Participation 11.262 12.446 11.375 30 22 23 Procurement, Acquisition and Construction 24 648,654 630,31 Advanced Short-Term Warnings and Forecasts Services 155 581,39 135 155 (19,000 63,498 135 155 693,811 25 659 26 mplement Seasonal to Interannual Climate Forecasts Service 27 Predict and Assess Decadal to Centennial Change 5,986 11,700 (350 11,350 2 234 13,584 28 Promote Safe Navigation 11.77 25.20 (25.20 3.185 3.18 29 Build Sustainable Fisheries 62,46 0 48,18 (39,784 8,400 57,474 0 65,874 6,500 30 ecover Protected Species 7,982 0 (6,500 2,000 2.000 67.853 90.387 (81,975 8.412 11.600 20.012 31 Sustain Healthy Coasts 32 24 19,779 35 35 17.127 17.127 (1,006) 35 35 16.121 ofrastructure 33 34 Total, PAC Strategic Plan Goal Participation 190 757,233 170 190 847,752 (172,809) 659 675,602 138,985 170 190 814,587 35 36 Other Account Funds 37 38 dvanced Short-Term Warnings and Forecasts Services 39 mplement Seasonal to Interannual Climate Forecasts Service 40 Predict and Assess Decadal to Centennial Change Promote Safe Navigation 41 932 22.92 (12,140 10.781 10.781 42 Build Sustainable Fisheries 109758 157.419 150.000 110.000 43 (7,419 (40,000 Recover Protected Species 152.86 (4,796 44 Sustain Healthy Coasts 15 15 10.36 5.56 15 5.568 45 frastructure 1536 16,18 20.469 36,655 36,655 46 (40,000) 163.004 Total, Other Funds Strategic Plan Goal Participation 20 287.311 20 20 206.890 (7,419) (16.936) 20.469 203.004 20 20 47 48 49 ALL APPROPRIATIONS 50 51 5578 132902 5877 5.584 1.455.54 (36.87 28.37 34.667 1.481.71 94.031 5.887 5.593 1.575.741 Advanced Short-Term Warnings and Forecasts Services 52 mplement Seasonal to Interannual Climate Forecasts Service 285 118057 340 319 151,040 (5,000 2,476 3,025 151,541 (7,890 340 319 143,65 337 449 2,819 424 53 Predict and Assess Decadal to Centennial Change 101800 419 113,28 (7,600 2,307 110,81 25,36 457 136,18 741 54 Promote Safe Navigation 829 12843 762 163,25 (38,893 2,836 3,464 130,66 6 17,774 809 831 148,43 2,424 1560 579602 2395 1,873 531.73 (67.20 (2.574 11.685 473.641 55,191 1.911 528.832 55 Build Sustainable Fisheries 21 29 17 638 28384 765 713 350,450 (25,69 3,336 4,075 332,162 49 37 (26,706 814 750 305,456 56 ecover Protected Species 57 Sustain Healthy Coasts 835 54894 951 925 507,255 (138,919 (388 5,384 373,332 15 (20,202 970 946 353,130 1410 164942 1118 990 126.526 497 27.046 151.024 24 11.261 1.144 1.014 162.285 58 ofrastructure (3,045 2 59 60 Total, ALL Appropriations Strategic Plan Goal Participation 11.472 3.254.64 12.636 11.585 3.399.089 (323.236 36.866 92.165 3.204.88 209 173 148.826 12.845 11.788 3.353.710

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F I J L AQ AR AS AT AU AV AW AX Strategic plan summary - Split of "All" category (\$ in thousands) Е AY AZ BA BB

4 5 6	FY 03 PROPOSED OPERATING PLAN	F	Ƴ 2001		FY 2002		Base Role up /Terminations		FY 20 Final A	03 ATB	CSRS Legislative Proposal	FY 2003 Final Base		FY 2003 President's Program Ch	3 Bud ange		FY 2003 President Budget	
7 8	Strategic Plan Goal Summary	E FTE	nacted Amount	POS	Enacted FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FIE	Amount
9 10	NMES																	
11	Advanced Short-Term Warnings and Forecasts Services																	
12	Implement Seasonal to Interannual Climate Forecasts Service																	
13	Predict and Assess Decadal to Centennial Change																	
14	Promote Safe Navigation																	
15	Build Sustainable Fisheries	217	18.601	0	0	0	0	0	0	0	0	0	0	0	0	0	0	d
16	Recover Protected Species	85	7.274	0	0	0	0	0	0	0	0	0	0	0	0	0	0	d
17	Sustain Healthy Coasts	11	966	0	0	0	0	0	0	0	0	0	0	0	0	0	0	d
18																		
19	Total, NMFS "ALL"	313	26,841	0	0	0	0	0	0	0	0	0	0	0	0	0	0	a
20	OAR		,															
21	Advanced Short-Term Warnings and Forecasts Services	0	3,070	3	2	2,794	0	0	0	0	0	2,931	0	0	0	3	2	2,931
22	Implement Seasonal to Interannual Climate Forecasts Service	1	3,611	6	3	4,608	0	0	0 0	0	0	4,009	0	0	0	4	2	4,009
23	Predict and Assess Decadal to Centennial Change	1	6,042	5	3	5,398	0	0	0	0	0	5,860	0	0	0	6	3	5,860
24	Promote Safe Navigation	0	0															
25	Build Sustainable Fisheries	93	9,905															
26	Recover Protected Species	0	0															
27	Sustain Healthy Coasts	28	3,019															
28																		
29	Total, OAR "ALL"	123	25,647	14	8	12,800	0	0	0	0	0	12,800	0	0	0	13	7	12,800
30																		
31																		
32	Corporate Service																	
33	Advanced Short-Term Warnings and Forecasts Services	397	30,146	469	415	31,940	159	0	0	43	53	35,872	5	4	3,719	528	465	39,416
34	Implement Seasonal to Interannual Climate Forecasts Service	35	2,677	49	43	3,318	11	0	0	3	4	2,431	0	0	252	36	42	3,593
35	Predict and Assess Decadal to Centennial Change	30	2,306	30	32	2,485	13	0	0	4	4	3,009	0	0	312	44	40	3,409
36	Promote Safe Navigation	30	2,910	03	47	3,364	10	0	0	4	5	3,304		0	349	50	44	3,712
37	Build Sustainable Fisheries	1/3	13,149	1/1	152	11,671	53	0	0	14	18	11,986	2	1	1,243	1/6	156	13,229
38 20	Recover Protected Species	85	6,441 12,455	113	100	7,692	31	0	0	8	10	6,923	1	1	718	102	90	7,640
39 40	Sustain Healthy Coasts	104	12,400	103	140	11,133	39	U	0	11	13	8,753		I	908	129	104	0,000
40 41	Total Cornorate Services	924	70.090	1 054	933	71 823	320			87	107	72 337	11	8	7 500	1 065	941	79 837
41 12		024	10,000	1,001		11,010	020	Ŭ	Ĭ	0.	107	12,001		Ů	1,000	1,000	041	10,001
43																		
44	OMAO																	
45	Advanced Short-Term Warnings and Forecasts Services	0	0	0	0	0	0	0	0	0	2.961	2.961	7	8	404	7	8	3.350
46	Implement Seasonal to Interannual Climate Forecasts Service	0	0	0	0	0	0	0	0	0	201	201	1	1	27	1	1	305
47	Predict and Assess Decadal to Centennial Change	0	0	0	0	0	0	0	0	0	248	248	1	1	34	1	1	290
48	Promote Safe Navigation	0	0	0	0	0	0	0	0	0	278	278	1	1	38	1	1	316
49	Build Sustainable Fisheries	0	0	0	0	0	0	0	0	0	989	989	2	3	135	2	3	1,124
50	Recover Protected Species	0	0	0	0	0	0	0	0	0	571	571	1	2	78	1	2	649
51	Sustain Healthy Coasts	0	0	0	0	0	0	0	0	0	722	722	2	2	99	2	2	751
52	Total OMAO	0	0	0	0	0	0	0	0	0	5,970	5,970	15	16	815	15	16	6,785
53																		
54																		
55	F = -17*1					0 50 -												
56	Facilities	~	0.405		-7	8,590	(4 500)			400	204	0.745	-		4 700	_	_	4.000
ວ/ F0	Advanced Short-Lerm warnings and Forecasts Services	6	3,105	1	1	3,820	(1,506)	0	0	183	224	2,745	0	0	1,768	1	1	4,980
50 50	Predict and Access Deceded to Contennial Change		270	1	1	397	(129)	0		10	19	230	0	0	101		1	404
59 60	Premote Safe Navigation	1	238	1	1	297	(116)	0		14	17	212	0	0	137	1	1	431
61	Build Sustainable Fisheries	3	1 35/	2	2	1 306	(109)	0	0	66	23	900	0	0	638	2	2	1 671
62	Recover Protected Species	1	664	2	2	920	(361)	0	0	44	54	659	0	0	424	2	1	965
63	Sustain Healthy Coasts	3	1,283	2	2	1,331	(541)	0	0	66	80	987	0	0	635	2	2	1,117
64	Total Facilities	15	7.220	15	15	8.590	(3.365)	n	0	410	500	6.135	0	0	3.952	15	15	10.087
65			.,		.0	0,000	(0,000)	ľ	ן ו		500	0,.00	ľ	Ĭ	0,002		10	
66																		
67												l	l					
68	PS/Other					16,186								1				

В	E	F	1	J	L	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB
				STRATE	GIC PLAN SUM	IMARY - SPLIT	OF "AL	L" CATE	GORY								

2							(\$ IN THOUSAND	DS)										
3																		
4 5 6	FY 03 PROPOSED OPERATING PLAN	F	V 2001		EX 2002		Base Role up /Terminations		FY 20 Final /	03 ATB	CSRS Legislative Proposal	FY 2003 Final Base		FY 200 President's Program Cl	3 s Bud hange		FY 2003 President	
7	Strategia Blan Coal Summary		nosted		Encoted						Tioposai			riogram or	lange		Buuget	
/ 0	Strategic Flatt Goal Suttiniary		Amount	POS	Enacleu	Amount	Amount	BOS	ETE	Amount	Amount	Amount	POS	ETE	Amount	DOS	ETE	Amount
a		FIE	Amount	F03	FIE	Amount	Amount	FU3	FIE	Amount	Amount	Amount	F03	FIE	Aniouni	FU3		Amount
60	Advanced Short Term Warnings and Fereneets Services	0	2 151	0	0	2 266	0	0	0	0	2 966	5 122	0	0	0	0	0	5 122
70	Implement Seasonal to Interannual Climate Eprecasts Service	0	1 383	0	0	2,200	0	0	0	0	2,000	3 200	0	0	0	0	0	3 200
71	Predict and Assess Decadal to Centennial Change	0	922	0	0	971	0	0	0	0	1,042	2 199	0	0	0	0	0	2 199
72	Promote Safe Navigation	0	3.534	0	0	3.723	0	0	0	0	4,708	8,431	0	0	0	0	Ő	8,431
73	Build Sustainable Fisheries	0	3.534	0	0	3.723	0	0	0	0	4,708	8,431	0	0	0	0	0	8,431
74	Recover Protected Species	0	1,229	0	0	1,295	0	0	0	0	1,638	2,932	0	0	0	0	0	2,932
75	Sustain Healthy Coasts	0	2.612	0	0	2.752	0	0	0	0	3,480	6.231	0	0	0	0	0	6.231
76	Total PS Other	0	15,366	0	0	16,186	0	0	0	0	20,469	36,655	0	0	0	0	0	36,655
77			,			,					,							í ľ
78	PAC																	n n
79	Advanced Short-Term Warnings and Forecasts Services	15	8,507	16	16	7,616	0	0	0	0	0	7,663	0	0	(450)	17	17	7,959
80	Implement Seasonal to Interannual Climate Forecasts Service	1	756	2	2	791	0	0	0	0	0	656	0	0	(39)	1	2	725
81	Predict and Assess Decadal to Centennial Change	1	651	1	1	593	0	0	0	0	0	593	0	0	(35)	1	1	688
82	Promote Safe Navigation	1	823	2	2	855	0	0	0	0	0	858	0	0	(50)	2	2	750
83	Build Sustainable Fisheries	7	3,711	6	6	2,783	0	0	0	0	0	2,764	0	0	(162)	6	6	2,671
84	Recover Protected Species	3	1,818	4	4	1,834	0	0	0	0	0	1,839	0	0	(108)	3	3	1,543
85	Sustain Healthy Coasts	6	3,515	5	5	2,655	0	0	0	0	0	2,754	0	0	(162)	4	4	1,785
86	Total PAC	35	19,779	35	35	17,127	0	0	0	0	0	17,127	0	0	(1,006)	35	35	16,121
87																		

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ST	RATE	EGIC P		ARY TOTAL	SUMMARY B	Y LO					
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4 5 6	FY 03 PROPOSED OPERATING PLAN	FY	2001		FY 2002	2	Base Role up /Terminations		FY 200 Final A)3 ТВ	CSRS Legislative Proposal	FY 2003 Final Base	Pi Pr	FY 20 resident ogram (03 's Bud Change		FY 2003 President Budget	
7 8	Line Office Summary	Ena FTE	cted Amount	POS	Enacted FTE	l Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS	FTE	Amount
9																		
10	National Ocean Service		-				-		-				-					
11	Build Sustainable Fisheries	0	0	0	0	9,931	0	0	0	0	0	9,931	0	0	0	0	0	9,931
12	Promote Sate Navigation	829	114354	580	625	120,155	(13,693	0	1	2,557	3,123	112,142	8	6	10,038	588	632	122,180
13	Recover Protected Species	501	400 504	0	8	3,000	U (117.420)	0	0	(4 757)	0 740	3,000	0	0	10.015	0	8	3,000
14	Sustain Healthy Coasts	591	482,534	010	4 004	3/8,9/6	(117,430	0	4	(1,/5/	3,712	263,501	0	0	12,315	4 204	608	2/5,816
15	Total, NOS	1,420	090,000	1,190	1,237	512,062	(131,123	0	Э	800	0,830	300,374	0	0	22,353	1,204	1,240	410,927
16	National Maxima Fisherina Osmira																	
17	National Marine Fisheries Service	4.005	540.007	0.040	4 500	440.004	(FF 00 4)	0	04	(0.504)	40.550	000.004	40	07	00 704	0.000	4 500	400.440
18	Build Sustainable Fisheries	1,695	510,907	2,013	1,530	440,994	(55,664	0	21	(3,501)	10,552	392,381	49	3/	33,761	2,062	1,588	426,142
19	Recover Protected Species	123	281,709	109	004	330,491	(19,199)	0	0	3,330	4,075	318,703	49	37	(20,700)	100	691	291,997
20		0.570	22,963	120	149	20,200	(3,003)	0	0	727	000	21,047	17	13	1,200	137	102	23,097
21	Total, NWFS	2,578	815,599	2,842	2,333	796,720	(79,866)	0	21	562	15,515	732,931	115	8/	8,305	2,957	2,441	741,230
22	Occupie and Atmospheric Research																	
23	Advenced Short Term Werpings and Ecrosopt Services	222	E0 700	201	226	66 402	(20.140)	0	1	1 707	2 109	E1 222	10	7	7 076	211	244	57 711
24	Ruild Sustainable Eisbarias	172	02,732	301	230	41 425	(20,149)	0	1	1,727	2,100	37,333	(20)	(20)	(24 152)	63	244	12.069
25	Docadal to Contonnial Change	329	103 861	201	261	100,000	(3,930)	0	0	202	2 810	100 435	(20)	(20)	10.524	400	366	12,000
20	Decadar to Centermial Change	0.00	100,001	001	501	000	(1,000)	0	0	2,507	2,013	2,007	0	0	(100)	-00-	000	120,040
21	Promote Sale Navigation	0	0	0	0	400	0	0	0	0	0	2,007	0	0	(109)	0	0	900
20	Sustain Healthy Coasts	122	42 217	145	103	82 304	(12 972)	0	2	642	794	71.054	0	0	(109)	145	105	31 591
30	Implement Seasonal to Intrannual Climate Forecasts	30	58 / 82	6	103	83 1/10	(13,073)	0	2	/3	53	83 744	0	0	(3805)	145	105	78 0/11
31	Total. OAR	895	350,419	926	785	383,762	(47.572)	0	3	5.001	6.109	347,300	(2)	(8)	(39,754)	923	779	307,546
32			000,110	010		000,102	(,0.1			0,001	0,100	0.1,000	(-/	(0)	(00,101)	0_0		001,010
33	National Weather Service																	
34	Advanced Short Term Warnings and Forecast Services	4724	692410	4812	4726	741193	-16730	0	0	23816	28439	776718	0	0	22236	4812	4726	798954
35	Implement Seasonal to Intrannual Climate Forecasts	0	399	0	0	1.890	0	0	0	0	0	1890	0	0	0	0	0	1890
36	Total, NWS	4.724	692.809	4.812	4.726	743.083	(16.730)	0	0	23.816	28.439	778.608	0	0	22.236	4.812	4.726	800.844
37				, í						, , , , , , , , , , , , , , , , , , ,						,	,	
38	National Environmental Satellite, Data and Information Ser	vice																
39	Advanced Short Term Warnings and Forecast Services	533	571,175	653	533	635,105	0	0	0	2,324	3,498	640,927	0	0	55,910	653	533	696,837
40	Build Sustainable Fisheries					0	0	0	0	0	0	0	0	0	0	0	0	0
41	Decadal to Centennial Change	0	2,993	0	0	500	0	0	0	0	0	500	0	0	3,000	0	0	3,500
42	Recover Protected Species	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Sustain Healthy Coasts	0	3991	0	0	4,750	0	0	0	0	0	4,750	0	0	0	0	0	4,750
44	Implement Seasonal to Intrannual Climate Forecasts	256	61799	277	256	63,948	(5,000)	0	0	2,199	2,686	63,833	0	0	(4,194)	277	256	59,639
45	Total, NESDIS	789	639,958	930	789	704,303	(5,000)	0	0	4,523	6,184	710,010	0	0	54,716	930	789	764,726
46																		
47	Corporate Services																	
48	Advanced Short Term Warnings and Forecast Services	412	38,653	484	430	39,556	159	0	0	43	53	43,535	5	4	3,269	545	482	47,374
49	Build Sustainable Fisheries	37	3,433	50	45	14,454	11	0	0	3	4	3,086	0	0	213	37	44	15,900
50	Decadal to Centennial Change	32	2,957	38	33	3,078	13	0	0	4	4	3,602	0	0	277	46	42	4,097
51	Promote Safe Navigation	40	3,739	54	48	4,439	15	0	0	4	5	4,222	1	0	298	51	45	4,462
52	Recover Protected Species	180	16,859	177	157	9,527	53	0	0	14	18	14,751	2	1	1,080	182	162	9,183
53	Sustain Healthy Coasts	88	8,259	117	104	13,787	31	0	0	8	10	8,762	1	1	610	105	93	10,623
54	Implement Seasonal to Intrannual Climate Forecasts	170	15,970	169	150	4,109	39	0	0	11	13	11,507	1	1	746	133	108	4,318
55	Total, Corporate Services	959	89,869	1,089	968	88,950	320	0	0	87	107	89,464	11	8	6,494	1,100	976	95,958
56																		
57	0140																	
58	Advanced Shart Term Warrings and Freedow Ormiters		12.024	444		40.405				500	0.440				0.004	404	400	00.454
59 60	Auvanced Short Lerm warnings and Forecast Services	89	7 700	114	91	13,405	(E E 07	0	1	509	6,448 5,600	20,362	1	8	8,804	121	100	29,151
61	Decadal to Centennial Change	3	1,708	299	204	43,094	(5,587)	0	0	045	5,090	43,048	1	1	45,501	300	205	15 094
62	Promote Safe Navigation	0	17,910	161	127	45 000	(25.200)	0	0	270	5 3 2 6	26 227	61	62	3,534	222	200	24 101
62	Recover Protected Species	0	10,638	56	51	17 85/	(6 500)	0	0	2/9	2,520	13 081	2	03	1,114	58	200	13 6/1
64 64	Sustain Healthy Coasts	0	3 714	70	51	12 652	(0,000)	0	0	0	2,027	14 000	2	3	677	70	J4 70	1/ 960
65	Implement Seasonal to Intrannual Climate Forecasts	0	2 371	63	60	8 127	(2,013	0	0	224	4,051	14,090	3	4	0//	65	73	10,704
66	Total. OMAO	92	57,891	826	733	151,119	(39.900)	0	1	1.667	2,001	141.362	77	80	66.524	903	814	207,886
67	,	52	51,001	020	.55		(00,000)	. 0		1,007	20,470	141,002		50	00,024		014	_01,000

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3																		
4							Base Role up		FY 200)3	CSRS	FY 2003	_	FY 20	03		FY 2003	
5	FY 03 PROPOSED OPERATING PLAN						/Terminations		Final A	тв	Legislative	Final Base	Pr	'esident'	s Bud		President	
6		FY	2001		FY 2002						Proposal		Pro	ogram C	hange		Budget	
7	Line Office Summary	Ena	acted		Enacted													
8		FTE	Amount	POS	FTE	Amount	Amount	POS	FTE	Amount	Amount	Amount	POS	FTE	Amount	POS		Amount
9	L	I I	I	I	I	l		l								I	1	I
69	Facilities		7 000	-1	_	0.000	(1 500)	-		100		7.0.15	-		1 700	-1		0.400
70	Advanced Short Term Warnings and Forecast Services	6	7,096	((8,320	(1,506)	0	0	183	224	7,245	0	0	1,768	(9,480
/1	Build Sustainable Fisheries	1	276	1	1	1,396	(129)	0	0	16	19	235	0	0	151	1	1	1,671
72	Decadal to Centennial Change	0	238	1	1	297	(116)	0	0	14	17	212	0	0	137	1	1	431
73	Promote Sate Navigation	1	300	1	1	429	(169)	0	0	21	25	307	0	0	198	1	1	469
74	Recover Protected Species	3	1,354	2	2	920	(543)	0	0	66	81	990	0	0	638	2	2	965
75	Sustain Healthy Coasts	1	664	2	2	7,331	(361)	0	0	44	54	6,659	0	0	4,424	1	1	11,117
76	Implement Seasonal to Intrannual Climate Forecasts	3	1,283	2	2	397	(541)	0	0	66	80	987	0	0	635	2	2	454
77	Total, Facilities	15	11,211	15	15	19,090	(3,365)	0	0	410	500	16,635	0	0	7,952	15	15	24,587
78																		
79																		
80																		
81																		
82	Total	E 007	1 070 000	0.074	0.000	1 500 000	(00.000)	-	-		10 770	1 5 10 100			00.000	0.450	0.000	1 000 500
83	Advanced Short Term Warnings and Forecast Services	5,997	1,376,000	6,371	6,023	1,503,982	(38,226)	0	2	28,603	40,770	1,540,120	23	19	99,363	6,450	6,092	1,639,508
84	Build Sustainable Fisheries	1,907	615,351	2,446	1,918	551,304	(67,319)	0	21	(2,555	16,616	486,701	30	18	55,474	2,462	1,956	555,959
85	Decadal to Centennial Change	370	111,958	492	456	123,031	(7,703)	0	0	2,325	4,317	116,292	9	6	26,471	510	470	149,057
86	Promote Safe Navigation	870	136,008	796	811	171,844	(39,047)	0	1	2,861	8,480	145,005	69	69	18,199	862	878	162,112
87	Recover Protected Species	906	310,561	944	873	362,191	(26,189)	0	0	3,417	6,800	352,931	53	41	(24,962)	1,001	917	319,186
88	Sustain Healthy Coasts	964	564,462	1,069	1,030	525,125	(139,250)	0	6	(336	9,499	390,663	21	17	(19,199)	1,078	1,042	371,851
89	Implement Seasonal to Intrannual Climate Forecasts	459	140,304	517	474	161,611	(5,502)	0	0	2,552	5,683	173,172	3	3	(6,520)	481	432	156,036
90		11,472	3,254,644	12,636	11,586	3,399,089	(323,236)	0	30	36,866	92,165	3,204,884	209	173	148,826	12,844	11,788	3,353,710

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STRATEGIC PLAN SUMMARY TOTAL SUMMARY																
				(\$	N THOUSANDS)										

FY 2003 CSRS FY 2003 FY 2003 FY 2003 Base Role up FY 03 PROPOSED OPERATING PLAN 5 /Terminations Final ATB Legislative Final Base President's Bud President FY 2001 FY 2002 6 Proposal Program Change Budget Strategic Plan Goal Summary Enacted Fnacted 8 FTF Amount POS FTE Amount Amount POS FTE Amount Amount Amount POS FTE POS FTE Amount Amount 10 **Operations and Research Funds** 11 12 5.827 783.94 5.853 845.44 28.603 37.24 895.90 5.92 932.606 Advanced Short-Term Warnings and Forecasts Services (19.22)36 42 6.29 6.220 23 19 13 Implement Seasonal to Interannual Climate Forecasts Ser 322 124,62 395 366 159.363 (5,118 2,495 3,248 158,416 (7,459 38 36 152,012 369 14 Predict and Assess Decadal to Centennial Change 104,39 491 455 109,767 (7,353 2,325 3,089 108,793 23,610 509 469 132,585 868 119.87 794 809 (13.847 2.861 3.772 15,17 860 87 149,747 142.06 134.610 60 15 Promote Safe Navigation 6 2,041 550.825 2,564 2,022 473.693 (27.907 21 9.647 12,773 468.426 33 51 21 (267 2,600 2,067 468.202 16 Build Sustainable Fisheries 17 809 180.483 879 815 (12.111 3.388 190.315 39 12.514 919 202.711 Recover Protected Species 195.143 4.710 843 0 22 18 1,039 18 Sustain Healthy Coasts 1,026 345,949 1,102 1,057 418,968 (57,446) 4,484 6,200 369,813 (30,160 1,087 338,256 20 11.262 2.210.100 12.447 11.376 2.344.448 (143.008) 53.802 71.037 2.326.278 209 173 49.84 12.654 11.578 2.376.119 21 Total, ORF Strategic Plan Goal Participation 30 22 23 Procurement, Acquisition and Construction 24 25 589.904 656.27 (19,000 637.976 63.048 701.770 Advanced Short-Term Warnings and Forecasts Services 170 151 171 659 15 17 26 Implement Seasonal to Interannual Climate Forecasts Se 756 79' 656 (39 725 (350 14,272 6,637 12,293 11,943 2,199 27 Predict and Assess Decadal to Centennial Change 12.59 (25.200 28 Promote Safe Navigation 26.055 858 3.13 3.935 (39.784 68.545 29 Build Sustainable Fisheries 66.173 50.967 0 0 0 11.164 57.312 30 Recover Protected Species 9,800 8.334 (6,500 1,839 1,89 3,543 11.166 11,438 21,797 31 Sustain Healthy Coasts 71,368 93,042 (81,975) 33 34 Total, PAC Strategic Plan Goal Participation 190 757.233 170 190 847.752 (172.809) 659 675.602 138.985 170 190 814.587 n 35 36 Other Account Funds 37 38 Advanced Short-Term Warnings and Forecasts Services 2,15 2,26 2,866 5,132 5,132 39 1382.9 1.457 1.842 3.299 3.299 Implement Seasonal to Interannual Climate Forecasts Se 40 Predict and Assess Decadal to Centennial Change 921.9 97′ 1,228 2,199 2,199 41 Promote Safe Navigation 3534.1 3.723 4,708 8.431 8.431 42 12.858 26.644 (12,140) 4,708 19.212 19.212 Build Sustainable Fisheries 43 **Recover Protected Species** 110,987 158,714 (7,419 1,638 152 932 (40,000 112,932 15 15 (4,796 11,799 11,799 Sustain Healthy Coasts 15 155,475 13,116 3.480 15 15 44 46 47 287.311 206.890 (16.936) 203.004 (40.000) 163.004 Total, Other Funds Strategic Plan Goal Participation 20 20 20 (7,419) 20.469 20 20 48 49 ALL APPROPRIATIONS 50 1.503.982 (38.226 40.770 1.539.013 1.639.508 51 Advanced Short-Term Warnings and Forecasts Services 5.997 1.376.000 6.371 6.023 28,603 23 19 99.472 6,450 6.092 382 52 Implement Seasonal to Interannual Climate Forecasts Se 323 126,760 397 367 161,611 (5,118) 2,495 5,091 162,371 (7,498 366 156,036 510 53 370 492 456 2,325 470 149.057 111,958 (7,703 4,317 122.935 25,815 Predict and Assess Decadal to Centennial Change 123,031 54 Promote Safe Navigation 870 136.008 796 811 171.844 (39.047 2.861 8.480 143.898 69 18.30 862 878 162.112 55 Build Sustainable Fisheries 2,053 629,85 2,574 2,033 551,304 (67,691 21 (2,493 17,481 498,802 33 21 57,04 2,611 2,078 555,959 883 (26,030 3,388 6,348 345,087 51 39 (25,594 922 319,186 56 Recover Protected Species 813 301,27 818 362,191 846 57 Sustain Healthy Coasts 1,047 572,79 1,122 1,077 525,125 (139,42 (312 9,67 392,779 22 18 (18,72 1,107 1,057 371,851 59 60 Total, ALL Appropriations Strategic Plan Goal Participat 11.472 3,254,64 12.637 11.58 3,399,090 (323,23) 36,866 92,165 3,204,88 173 148,82 12.844 11.788 3.353.710 20

NOAA Unrequested Projects Terminations/Reductions (Dollars in Thousands)

	Funding FY 2002 Enacted	Terminated Amount	FY 2003 President's Budget
OPERATIONS, RESEARCH, AND FACILITIES (ORF)			
National Ocean Service:			
Joint Hydrographic Center - Bathymetric Study	\$750	(\$750)	\$0
Electronic Navigation Chart - AK	900	(900)	0
Shoreline Mapping	2,000	(963)	1,037
Address Survey Backlog/Contracts	2,000	(2,000)	0
Gulf of Mexico and Lake Pontchartrain contracts	4,535	(4,535)	0
Geodetic Survey - Louisiana	1,000	(1,000)	0
Geodetic Survey - Wisconsin	500	(500)	0
PORTS	4,000	(1,000)	3,000
Great Lakes NWLON	2,045	(2,045)	0
Coastal Observation Technology System	500	(500)	0
Alliance for Coastal Technologies	2,000	(2,000)	0
Center for Integrated Marine Technologies	2,000	(2,000)	0
Coastal Change Analysis	2,000	(2,000)	0
Wave Current Information System	1,000	(1,000)	0
University of New Hampshire Sea Grant	2,000	(2,000)	0
Beaufort/Oxford	3,917	(417)	3,500
Ocean Assessment Program - Base	13,721	(113)	13,608
Pacific Coastal Services Center	1,750	(850)	900
South Carolina Pfiesteria Research	600	(600)	0
Narragansett Explore the Bay Program	2,000	(2,000)	0
National Ocean Science Education Program	1,500	(1,500)	0
May River Ecosystem	100	(100)	0
New Bedford Oceanarium Research Program	3,000	(3,000)	0
CREST	450	(450)	0
CI-CORE	1,750	(1,750)	0
Lake Pontchartrain	1,350	(1,350)	0
Aquatic Resources Environmental Initiative	8,500	(8,500)	0
Oil Skimmer - NH	225	(225)	0
Regional Restoration - LA	1,000	(1,000)	0
Coastal Remediation Technology	750	(750)	0
Lafourche Parish	2,000	(2,000)	0
Palmyra Atoll Bioremediation	750	(750)	0
Murrells Inlet Special Area Management Plan	300	(300)	0
Long Term Estuary Assessment Consortium	1,200	(1,200)	0
Mississippi River/Gulf of Mexico Nutrient Watershed	1,000	(1,000)	0
Northwest Straits Citizens Advisory Committee	700	(700)	0
Subtotal, NOS	73,793	(51,748)	22,045

	Funding		FY 2003
	FY 2002 Enacted	I erminated Amount	President's Budaet
National Marine Fisheries Service:			
Alaska Fisheries Development Foundation	\$750	(\$750)	\$0
Charleston Bump Billfish Tagging	150	(150)	0
Great South Bay Hard Clams	250	(250)	0
Gulf and South Atlantic Fisheries	400	(400)	0
Hawaii Stock Management Plan	500	(500)	0
Highly Migratory Shark Fishery Research	1,500	(1,500)	0
NEPA Impact on Ocean Climate Shifts	6,000	(6,000)	0
Northeast Consortium Cooperative Research	5,000	(5,000)	0
NEPA - Predator/Prey Relationships	2,000	(2,000)	0
South Carolina Taxonomic Center	350	(350)	0
NEPA Stellar Sea Lion Pollock (N. Pacific Council)	2,000	(2,000)	0
Alaska Near Shore Fisheries	998	(998)	0
Anadromous Fish Commission (N. Pacific)	750	(750)	0
Cooper River Corridor Management	150	(150)	0
HI Community Development	500	(500)	0
NEPA - Hawaiian Sea Turtle	3,000	(3,000)	0
Oregon Groundfish Outreach Program	1,000	(1,000)	0
Oregon Groundfish Disaster Assistance	1,500	(1,500)	0
Oregon Groundfish Cooperative Research	2,000	(2,000)	0
Marine Mammal Protection - Erysipelas Research	150	(150)	0
Alaska Fisheries Foundation	500	(500)	0
Marine Mammal Strandings - Charleston Health and Risk	800	(800)	0
Steller Sea Lion Recovery Plan - State of Alaska work	2,495	(2,495)	0
Chesapeake Bay Environmental Education Program	1,200	(1,200)	0
Wetland Herbivory Control	1,000	(1,000)	0
Mobile Bay Oyster Recovery	1,000	(1,000)	0
Connecticut River Partnership	300	(300)	0
Bronx River Restoration	1,500	(1,500)	0
Pinellas County Environmental Foundation	1,500	(1,500)	0
LA Department of Natural Resources	1,385	(1,385)	0
Marsh Restoration - NH	1,000	(1,000)	0
Subtotal, NMFS	41,628	(41,628)	0

	Funding	FY 2003		
	FY 2002	Terminated	President's	
	Enacted	Amount	Budget	
Occupie and Atmospheric Decements				
Oceanic and Atmopheric Research:		(*****		
	\$25U	(\$∠50) (500)	\$U	
Air Ouleity Ecrosopting Dilet Drogrom	2 000	(000)	0	
All Quidity Forecasting Fliot Flogram	3,000	(3,000)	0	
New England Air Quality Study	3,000	(3,000)	0	
STORM	340	(1,000)	0	
National Institute for Lindersea Science and Technology	2 500	(2 500)	0	
Aquatic Ecosystems - Cannan Valley Institute	4 300	(2,300)	0	
Carolina Coastal Ocean Observing and Prediction System	2 800	(2,800)	0	
Gulf of Maine Council	2,000	(500)	0	
Lake Champlain Research Consortium	250	(250)	0	
NISA/Ballast Water Demonstration	2 250	(2 250)	0	
New Hampshire Milfoil	275	(275)	0	
Cooperative Institute for New England Mariculture and Fis	3.000	(3.000)	0	
Aquaculture Education Program - Cedar Point, MS	1.000	(1,000)	0	
Pacific Tropical Ornamental Fish	450	(450)	0	
Aguaculture Management Plan - RICRMC	1,500	(1,500)	0	
SE Atlantic Marine Monitoring and Prediction Center	998	(998)	0	
Tsunami Hazard Mitigation	3,300	(1,000)	2,300	
Subtotal, OAR	31,222	(28,922)	2,300	
National Weather Service				
New England Data Buovs	750	(750)	0	
Mt. Washington Observatory	500	(500)	0	
North Carolina Flood Mapping Pilot	4,000	(4,000)	0	
Susquehanna Reiver Basin Flood System	1,310	(1,310)	0	
NOAA Weather Radio Transmitters - ME	300	(300)	0	
NOAA Weather Radio Transmitters - NH	230	(230)	0	
NOAA Weather Radio Transmitters - SD	350	(350)	0	
NOAA Weather Radio Transmitters - WY	374	(374)	0	
NOAA Weather Radio Transmitters - Big Horn, WY	76	(76)	0	
NOAA Weather Radio Transmitters - WI	450	(450)	0	
North Dakota Agricultural Weather Network	270	(270)	0	
WSR-88D in Mississippi	3,100	(3,100)	0	
ASOS - AK Aviation	4,000	(4,000)	0	
Subtotal, NWS	15,710	(15,710)	0	

	Funding		FY 2003
	FY 2002	Terminated	President's
	Enacted	Amount	Budget
National Environmental Satellite, Data and Information Serv	ice:		
GOES Data Archives Project	2.000	(2.000)	0
Regional Climate Data Center	3.000	(3,000)	0
Subtotal, NESDIS	5,000	(5,000)	0
Total, ORF	167,353	(143,008)	24,345
PROCUREMENT, ACQUISITION AND CONSTRUCTION:			
National Ocean Service:			
Coastal and Estuarine land conservation	\$15,825	(\$15,825)	\$0
NERRS construction & land acquisition			0
ACE Basin	13,500	(13,500)	0
Great Bay Partnership	6,000	(6,000)	0
Marine Sanctuaries			0
Florida Keys National Marine Sanctuary	6,500	(6,500)	0
Humpback Whale National Marine Sanctuary	1,500	(1,500)	0
National Monitor Sanctuary	5,000	(5,000)	0
Monterey Bay National Marine Sanctuary	1,250	(1,250)	0
Stellwagen Bank National Marine Sanctuary	500	(500)	0
Kachemak Bay service facility	800	(800)	0
Kasitsna Bay Lab	5,500	(5,500)	0
MEHRL	14,000	(14,000)	0
Coastal Service Center	4,000	(4,000)	0
Beautort Lab repairs	5,000	(5,000)	0
Subtotal, NOS - PAC	79,375	(79,375)	0
National Marine Fisheries Service:			
Alaska Fisheries Center Juneau	21,100	(21,100)	0
Aquatic Resources	5,000	(5,000)	0
Ketchikan facilities	1,500	(1,500)	0
Kodiak pier	2,000	(2,000)	0
NY Botanical Gardens	4,034	(4,034)	0
Santa Cruz Lab	550	(550)	0
Subtotal, NMFS - PAC	34,184	(34,184)	0
Oceanic and Atmospheric Research:			
Stone Lab	350	(350)	0
Norman Consolidation	16,000	(16,000)	0
Subtotal, OAR - PAC	16,350	(16,350)	0
National Weather Service:			
Huntsville WFO	3,000	(3,000)	0
Subtotal, NWS - PAC	3,000	(3,000)	0

	Funding FY 2002 Enacted	Terminated Amount	FY 2003 President's Budget
Program Support/Office of Marine and Aviation Operations:			
ADVENTUROUS replacement	4,200	(4,200)	0
ALBATROSS IV repairs	3,000	(3,000)	0
FAIRWEATHER refurbishment	10,500	(10,500)	0
GORDON GUNTER	1,500	(1,500)	0
Naval surplus vessels for coastal research (YTT)	3,500	(3,500)	0
Small waterplane area twin hull vessel	5,000	(5,000)	0
T-AGOS vessel conversion	6,000	(6,000)	0
Hydrographic equipment upgrades	6,200	(6,200)	0
Subtotal, PS/OMAO - PAC	39,900	(39,900)	0
Total, PAC	172,809	(172,809)	0
OTHER ACCOUNTS:			
National Marine Fisheries Service:			
Washington State Buyback	5,419	(5,419)	0
Pacific Salmon Commission	2,000	(2,000)	0
Subtotal, NMFS - OTHER	7,419	(7,419)	0
Total, Other	7,419	(7,419)	0
Total NOAA Terminations	347,581	(323,236)	24,345

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