NOAA's Climate Change Research Initiative

What is requested?

NOAA requests an increase of $16.9 million and 8 FTE in the Climate Observations and Services line item and Procurement, Acquisitions, and Construction (PAC) to work towards the goals of the Climate Change Research Initiative (CCRI). The President announced the CCRI in June of 2001 to focus on areas of uncertainty in climate change science and identify priority areas where investments can make a difference. He committed to providing resources to build climate observation systems and proposed a joint venture with the European Union, Japan, and other nations to develop state-of-the-art climate modeling that will improve our understanding of climate change and its potential impacts. This budget request represents the second year of the President's program.

Why do we need it?

The economic impact of mitigating climate change – whether natural or anthropogenic – could be significant. Both domestic policy development and international engagement on climate change issues must be based on the best science and the most up-to-date resources for decisionmaking. This request specifically targets fundamental areas of inquiry undertaken by NOAA and the Climate Change Science Program on scientific uncertainties identified by the National Academy of Sciences. The increase will provide a broad-scale look at the climate system, help us determine uncertainties in predicting system behavior, study the regional impacts of climate change, and allow NOAA to analyze key scenarios of interest for policy-makers. The specific proposed actions aim to reduce the present uncertainties in climate science, develop enabling modeling capabilities, and develop research and data products that will facilitate the use of scientific research to support policy and management decisions.

What will we do?

This request supports improvement of our predictive and observational capabilities in several key areas.

- NOAA will continue its work to build and sustain a **Global Ocean Observing System** (+$6.3M) that will accurately document climate-scale changes in ocean heat, carbon, and sea level. The ocean is the memory of the climate system and is second only to the sun in affecting seasonal variability and long-term climate change. The key to possible abrupt climate change may lie in deep-ocean circulation, and changing sea level is one of the most immediate impacts of climate change. More oceanic data, collected at finer resolutions, will allow us to document long-term trends in sea-level change, determine ocean carbon sources and sinks, measure oceanic heat uptake and release, and help lead to better models. NOAA will upgrade tide gauge stations and install geographic position system (GPS) receivers at selected stations to document sea level changes and provide calibration points for satellite instruments. A global network of ocean reference stations will be established to document long-term ocean/atmosphere variability and provide validation points for climate forecast models. The global surface drifting buoy array will be completed, adding sensors in data sparse regions to measure sea surface temperature and currents. In addition, dedicated ship support will be provided for deployment of the drifting and moored arrays, as well as for a survey of the global oceans to measure carbon content and change. Among other additions, NOAA will add 10 tide gauges, devote an extra 60 days at sea, 240 surface drifting buoys, and 4 tropical moored buoys. The request will bring to completion approximately 48% of the ocean observing system currently under construction.

- NOAA will support the implementation of a **Carbon Cycle Atmospheric Observing System** (+$5.0M) to begin defining carbon dioxide sources and sinks in and around the U.S. in order to gauge the effectiveness of future carbon emission and sequestration strategies. Carbon dioxide is considered the most important "excess" (anthropogenic) greenhouse gas. There is a compelling need to quantify its uptake by the land and ocean. Advances in carbon measurement and understanding will support products such as cutting-edge "maps" of carbon dioxide uptake over North America and adjacent ocean basins, routine projections of carbon sources and sinks into the future, and assessment of carbon management options. In order to begin defining North American carbon sources and sinks,

expansion of a pilot program using small aircraft and tall towers to profile carbon gases will begin. The feasibility of inferring carbon dioxide amounts from current satellite instruments will be studied as a prelude to future satellite instrument data analyses, which will provide higher accuracy in the inference of carbon dioxide. Assimilation of carbon data into numerical weather models will also be studied with the expectation of improvements in forecast models.

- **Climate Change Uncertainties Caused by Aerosols** (+$1.0M) will be another CCRI topic NOAA will investigate. Aerosols are small particulates that remain in the atmosphere for short durations yet significantly influence climate by absorbing and radiating heat. NOAA will measure the distribution of soot and related aerosols, develop models to link sources and emissions to observations, and improve satellite algorithms. The work will lead to scientific information that decision-makers can use to make short-term policies and help clarify the connections between climate and air quality.

- NOAA will establish the **Climate Change Science Program Office** (+$1.1M) to support our Nation's interagency climate and global change program. The Department of Commerce, as the lead agency for the CCRI, will establish the office with broad physical and social science capabilities to ensure that the benefits of scientific research are applied to climate change policy issues and decision support. The effort will enable coordinated programmatic decisions for the CCRI, and support direct application of science products such as climate scenarios and carbon source/sink distributions to such questions as alternative energy strategies, climate change adaptations, and ranges of emissions scenarios.

- Finally, NOAA's **Climate Change Computing Initiative** (+$3.5M in PAC account) will: (1) enhance the Geophysical Fluid Dynamics Laboratory's supercomputing capability by 1/3 to enable the running of computer model simulations relevant to policy and business issues and (2) turn NOAA's investments in the CCRI and previous research into policy-relevant knowledge. The new computing power will be used to explore specific scenarios that go beyond those produced by the Intergovernmental Panel on Climate Change (IPCC) and will be designed to answer questions asked directly by policy-makers.

What are the benefits?

In addition to the specific benefits outlined above, NOAA will be better positioned to: (1) reduce climate-change uncertainties with major advances in understanding of greenhouse gases and aerosols; (2) ensure the existence of a long-term observing system that provides a more definitive observational foundation to evaluate decadal-to-centennial scale changes; (3) enhance research by coupling physical, chemical, biological, and human systems; (4) enhance climate modeling capabilities; and (5) improve the effectiveness of decision support systems and analysis of the response of human and natural systems to multiple stresses. Simply put, CCRI will provide us with a suite of decision tools to better address the issue of climate change and variability.

NOAA's Ecosystem Forecasting and Management Initiative

The Fiscal Year (FY) 2004 budget request for the National Oceanic and Atmospheric Administration's Ecosystem Forecasting and Management Initiative totals $48.2 million, including $42.7 million for enhancing research programs (offset by $262,000 in decreases) and $5.5 million for improving management activities (offset by $27.5 million in decreases). This theme focuses on the physical, chemical, and biological components of ocean and coastal ecosystems, rebuilding fishery resources, conserving and restoring living marine resources and habitats, and recovering protected species.

Incorporating Ecosystem Considerations

NOAA proposes a significant expansion and refocusing of its science and management enterprise to incorporate ecosystem considerations into its living marine resource and coastal stewardship responsibilities. Ecosystem-based resource management relies on a comprehensive knowledge of the ecological system, its inhabitants (including humans), and its dynamics. Meeting this challenge will require integrating the objectives of multiple portions of NOAA's past environmental stewardship portfolio, using information from its environmental assessment and prediction portfolio, and accelerating the pace and scope of science-based management that will take place in this larger context. NOAA needs to increase the use of available ecosystem data and information; integrate areas of expertise and research into cross-line office information systems; expand local, state, and constituent-based partnerships; and further develop decision and policy models to accomplish NOAA's living marine resource and coastal stewardship missions. NOAA also needs to improve its capability to disseminate this information and explain its decisions to constituents in a timely, consistent, and understandable manner.

To meet these challenges, NOAA proposes new investments in both its research and management programs.

Expanded Research and Science Programs - $70.2M

Climate Regimes and Ecosystem Productivity ($2.0 million) Funding would improve the understanding and prediction of climate change on major U.S. marine and coastal ecosystems.

Modernize and Expand Stock Assessments ($3.0 million) Funding would improve the comprehensiveness, timeliness, quality, and communication of state-of-art assessments to NOAA Fisheries and the Regional Fishery Management Councils.

Section 7 Consultations ($2.0 million) New funding is necessary to meet court-ordered time lines to conduct Endangered Species Act section 7 consultations on pesticides with the Environmental Protection Agency in California and Washington.

New England Groundfish Observer ($3.0 million) Expand and modernize observer coverage in the Northeast to meet the Court ordered settlement agreement for observer coverage in the New England groundfish fishery.

Social Sciences Program ($220,000) Funding would be used for improved consideration of the social and economic impacts of fishery management decisions, which is critical to the long-term sustainability of living marine resources and the economic health of our coastal communities.

Columbia River Biological Operation Implementation ($1.6 million) Funding will be used for research, monitoring, and evaluation as part of the Columbia River Biological Opinion to measure changing habitat capacity, establish the linkages between habitat attributes and salmon distribution and track population growth rate and habitat trends.

Invasive Species ($1.0 million) Funding will be used to develop alternative technologies for the treatment of ships' ballast water to eliminate the potential for invasions of non-indigenous marine species to U.S. and other waters; to set up a nationally coordinated monitoring system for aquatic nuisance species focusing on marine protected areas, particularly National Marine Sanctuaries, Estuarine Research Reserves, and areas vulnerable to invasion such as ports, harbors, and embayments; and to implement an Invasive Species Control and Habitat Restoration initiative through testing of control mechanisms and restoration of native species and habitat conditions in ecosystems that have been invaded.

Sea Grant ($57.4 million) The 30 Sea Grant programs, located in coastal and Great Lakes states and Puerto Rico, serve as the core of a dynamic national network of more than 300 participating institutions involving more than 3,000 scientists, engineers, outreach experts, educators and students. The Sea Grant network addresses key issues and opportunities in areas such as aquaculture, aquatic nuisance species, coastal community development, estuarine research, fisheries management, coastal hazards, marine biotechnology, marine engineering, seafood safety and water quality.

Improved Management Activities - $5.8M

Reducing Bycatch ($2.8 million) Funding will be used to enhance and coordinate technical expertise to respond to bycatch issues, including examining existing bycatch reduction methods, evaluating their effectiveness, and designing and testing new methods.

Regulatory Streamlining ($1.5 million) Funding would provice for increased regulation processing capacity within NOAA Fisheries regions and training programs in NEPA and other administrative requirement, both regionally and nationally.

Columbia River Biological Operation Implementation ($1.5 million) In addition to the $1.6 million with in the science section, this proposed $1.5 million is to be used to ensure management activities associated with the Federal Columbia River Power System Biological Opinion and Basinwide Recovery Strategy are undertaken. These funds would allow NOAA Fisheries to promote subbasin planning, enhance salmon recovery planning, and review passage and screening enhancements in priority watersheds.

For more information, please contact NOAA's Office of
Legislative Affairs at 202-482-4981.
www.noaa.gov

Environmental Monitoring & Prediction

The FY 2004 president's budget includes an increase of $ 84.5 M for the Environmental Monitoring and Prediction theme to sustain and improve critical weather and water prediction services. This allocation will support technological advancements in NOAA's severe weather prediction efforts; allow collection of data on the status and health of the ecosystem; maintain infrastructure needed to ensure basic operations and safety of NOAA employees; and incorporate and expand NOAA's satellite monitoring and in situ observations.

Investments

The Environmental Monitoring and Prediction theme is directed toward the collection of data in order to monitor and predict the environment's climate and weather patterns. Monitoring and dissemination of the data will serve as a tool to facilitate the decision making process on management and forecasting. This theme also seeks resources to expand the use of data collection platforms (aircraft, observing systems, satellites) in order to increase and improve data input in forecasts resulting in improved performance measures. The following program increases will sustain current operations and expand existing services which are essential to maintaining forecast abilities and predicting severe weather.

Increase Highlights

- Included in the total requested increase is $2.0M for enhanced Coastal Global Ocean Observing Systems (C-GOOS), and $3.6M for maintaining the existing observational infrastructure at four stations in Micronesia to continue observations in the Pacific Region.

- Also requested is an increase of $3.7M for NEXRAD technology infusion to accelerate the deployment of the NEXRAD Open Radar Data Acquisition and Dual Polarization, and $2.9M for replacement of the National Weather Service's Telecommunications Gateway (NWSTG). Infusion and acceleration of NEXRAD planned product improvement by 1-2 years will result in increased tornado detection accuracy from 68% to 75% and improve tornado warning lead time from 11 minutes to 15 minutes by FY2007.

- An addition of $1.3M will sustain operations and maintenance of the Susquehanna River Basin Flood System enhanced flood prediction capabilities.

- A replacement Turbo Commander for conduction snow surveys is requested

and priced at $1.5M. Scheduled mid-life aircraft maintenance and other increases in aircraft upkeep requires an additional $1.5M.

- An increase of $1.3M is for the international atmospheric research program: THe Observing system Research and Predictability Experiment (THORPEX).

- $81.7M is requested for NOAA's major space-based observing platforms, the Geostationary Operational Environmental Satellites (GOES) and NOAA's Polar-orbiting Operational Environmental Satellites (POES) and the National Polar-orbiting Operational Environmental Satellites System (NPOESS).

The table below provides a complete listing of all of the FY2004 President's Budget increases and decreases.

Environmental Monitoring & Prediction

(in millions)

Environmental Monitoring	**Increase/Decrease**
GOES R, N, I-M	$50.2
POES and NPOESS	$31.5
C-GOOS	$ 2.0
Subtotal	**$83.7**
Environmental Prediction	
THORPEX	$ 1.3
Susquehanna River	$ 1.3
Pacific Island Compact	$ 3.6
FTE Savings Due to Modernization	($ 3.0)
NOAA Wind Profiler	($ 4.2)
Aircraft Maintenance	$ 1.5
NWSTG Replacement	$ 2.9
NEXRAD Tech Infusion	$ 3.7
AWIPS	($ 2.1)
Weather and Climate Supercomputing	($ 1.9)
Turbo Commander	$ 1.6
Gulfstream-IV Instrumentation Upgrades	($ 3.8)
Subtotal	**$ 0.82**
Total	**$84.5**

Energy and Commerce
+$7.7M

NOAA's Energy and Commerce Theme

NOAA's Energy and Commerce theme builds on NOAA's role in energy, and examines the next steps toward implementing those objectives and activities required to upgrade the Nation's Marine Transportation System (MTS).

NOAA emphasizes the integration of services for safe and efficient navigation, helping to eliminate the guesswork in navigation, and support a safe, efficient and profitable MTS. Electronic navigational charts, hydrographic surveys, shoreline mapping, real-time tides and current information, forecast water conditions, high accuracy positioning data and tools for accident response and waterways risk management – this advanced suite of services and the research and development which supports it positions NOAA to respond effectively to existing and future needs of the maritime community. NOAA's integrated suite of products and services helps to protect life and property, support economic growth and development, and protect the environment. In addition, NOAA is responding to ensure that the Nation's energy supply needs, for commerce and economic growth, continue to be met in the safest and most efficient manner possible by:

- Promoting safe passage through America's waterways;
- Increasing the capacity and efficiency of American ports, and;
- Facilitating efficient and effective energy resource exploration, extraction and delivery.

Within this crosscutting theme, NOAA requests an increase of $6.5 million for MTS service improvements. Included are increases for electronic navigational charts ($2.0M), oceanographic forecast model systems ($1.0M), a vessel time charter ($2.0M), and the National Water Level Observation Network ($1.5M).

In addition, within this crosscutting theme NOAA requests an increase of $1.2 million to enhance the energy security program within the agency-wide Energy initiative. The Energy initiative is managed by the U.S. Weather Research Program.

Electronic Navigational Charts: The increase of $2.0M for electronic navigational charts (ENCs) will improve, expand and maintain ENC coverage to enhance navigation safety in the Nation's ports, harbors, waterways, and offshore waters. NOAA will produce one hundred additional ENCs in FY 2004 to provide contiguous ENC coverage for the Gulf of Mexico and the East Coast.

Oceanographic Forecast Model Systems: NOAA requests an increase of $1.0M to develop and implement forecast model systems for key ports and bays. Oceanographic forecast model systems have reached a level of sophistication such that they can now be used to benefit safe and efficient maritime commerce in the United States by providing a variety of real-time and forecast information, with full 3-dimensional coverage of a port, bay, or coastal region. These models provide 24-hour or longer forecasts of water levels which allow commercial shippers and port authorities to make economic decisions such as how much cargo to load or when an incoming ship should arrive to maximize safe, efficient transit of waterways. Underkeel clearance information for deep-draft oil tankers, container ships and cargo ships helps to prevent dangerous groundings that can close down ports and lead to hazardous spills. Ocean current forecasts are also critical for predicting the movement of hazardous material spills when they occur. NOAA expects to have nine such models operating around the country by FY 2006.

Vessel Time Charter: An increase of $2.0M is requested for a vessel time charter to expand NOAA's hydrographic surveying capability. This increase will augment the funds for a time charter in the President's FY 2003 budget. The FY 2004 increase would enable NOAA to engage a single time charter vessel capable of surveying a total of approximately 550 square nautical miles (snm) per year.

National Water Level Observation Network: NOAA requests an increase of $1.5M to strengthen the National Water Level Observation Network (NWLON). The 175 station network monitors tide, water level and other oceanographic and meteorological parameters, and is a critical observation network for nautical charting, real-time navigation, hazardous material response efforts, marine boundaries, long-term sea rise, tsunami and storm surge warnings, habitat restoration, and many other applications, including homeland security. With this increase, NOAA will begin the upgrade of water level stations with new equipment and data collection platforms, repair numerous NWLON stations around the country, and add meteorological and oceanographic sensors at various stations.

Energy Security Program: NOAA requests an increase of $1.2 million to enhance the electrical load forecasting component of the agency-wide Energy initiative. The Energy initiative is part of the U.S. Weather Research Program. Specifically, the Energy initiative, which was designed to improve electrical load forecasting and energy operations management, will increase to a total of $7.3 million.

NOAA FY 2004 Budget

National Ocean Service (OR&F)	**FY 2004 Change ($M)**
Mapping & Charting	
Electronic Navigational Charts	$2.0
Mapping & Charting Base	$1.0
Vessel Time Charter	$2.0
Tide & Current Data	
NWLON	$1.5
Oceanic & Atmospheric Research (OR&F)	
U.S. Weather Research Program	
Energy Security Program	$1.2
TOTAL	**$7.7**

Homeland Security

NOAA requests $65.1 million to enhance existing capabilities to support the needs of the new Department of Homeland Security and to ensure its own security. This budget initiative captures the elements that will help NOAA move in the direction to achieve these objectives.

Since the tragic events of September 11, 2001, Homeland Security has been a top priority for the Nation and within NOAA. NOAA's internal examination and external relations are helping to define organizational strengths and those needing further attention. Within the FY 2004 NOAA Budget request, this theme focuses on the further refinement of existing contributions by NOAA to the national Homeland Security effort, and to shore up infrastructure requirements designed to address safety and security issues of NOAA facilities and information technology, as well as single points of failure.

Included in the FY04 request is an increase of $5.5M for the enhancement and upgrade of the current NOAA Weather Radio operations - also recognized as the All Hazards Warning Network. NOAA recognizes that its existing network plays a major role today in alerting the public to natural hazards. NOAA believes and finds support within the Department of Homeland Security that with enhancements this system can become a truly National Hazard Support Advisory system. Most, 85-90 percent of the US population, is covered by the current system; but clearly no one can be left out of such important notifications. Therefore the requested funding will further refine existing NOAA contributions to the National homeland security effort, as well as develop new ones. NOAA's experience and expertise is especially useful in supporting first responders. To assure that they too have all the information they need to get the job done, this funding will address deficiencies in performance related to collection and dissemination, critical automation needs, and single points of failure.

Recognizing NOAA's own physical vulnerability, part of its $65.1M will be used to initiate upgrades to facilities, in particular for NOAA's environmental satellite facilities which currently are a single point of failure. Additionally, NOAA is requesting an increase of $2.2M for Emergency Preparedness and Safety for the National Weather Service Facilities Physical Security. This funding will be applied to NOAA Weather Offices throughout the U.S., a total of 149, and bring them into compliance with physical security requirements as specified by the Department of Justice. The need for the increase (from level 1 to level 2) is borne out of the bombing of the Federal Building, Oklahoma City, Oklahoma. And as has been seen since then, such breaches of security continue to grow. Increases will fund one-time costs starting in FY04 for monitoring/alarm systems and upgraded exterior lighting at all 149 offices/facilities, with some initial recurring costs for maintenance contracts for security systems and cyclic replacement of monitoring equipment to keep technology current. Additionally, many of the facilities lack security services, existing security equipment doesn't receive regular maintenance, alarm systems are obsolete, and electronic cipher door locks require replacement.

As part of the Homeland Security base funding of $57.4M, NOAA is targeting the enhancements (including refinement, upgrading, reenforcement) of its products and services that have been viewed as critical to homeland security by both NOAA, other federal agencies and the newly formed Department of Homeland Security. Each NOAA line office has been engaged in activities (working groups, projects and requests for services) related to homeland security. As such the focus of the funding will be used for mapping and charting activities for the coast and improved shoreline delineation; both identified as priorities from the homeland security community. Funding will be applied for the vessel monitoring system as part of enhancing NOAA's

existing law enforcement responsibilities done in conjunction with the US Coast Guard, improved dispersion modeling, enhancing security of seafood imports, protection of critical operational satellite security and deficiencies in necessary system redundancies.

FY2004 Highlights

Infrastructure, Maintenance, Safety and Human Capital Budget

This theme covers current infrastructure requirements, health, safety and security-related activities. This includes investment in NOAA's people so they can better deliver services and products to conduct NOAA's mission; safeguarding NOAA employees' health and safety through improvements and upgrades in NOAA's facilities and equipment; and maintaining and improving NOAA's data collection capability to meet program requirements. The theme request includes $248.4 million which is a $21.8 million increase from the FY 2003 President's Budget Request.

Program Changes

Facilities Repairs, Maintenance, Safety and Environmental Compliance

This includes an increase of $3.0 million for NOAA's Facilities Repair and Renewal program. It will provide funding for reduction of numerous health-and-safety deficiencies associated with many of NOAA's facilities. These funds will be applied to the current backlog of over $53.4 million in the Capital Renewal & Repair Program (CRR) projects list. An increase $2.0 million for NOAA's Safety and Environmental Compliance Program will allow NOAA to eliminate its existing backlog of environmental remediation projects in FY 2004 and begin to address widespread problems regarding asbestos and lead-based paint at NOAA facilities. Funding will also provide a complete inventory of all underground and aboveground storage tanks at NOAA facilities.

NWS Construction and NOAA Center for Weather & Climate Prediction

This includes an increase of $13.4 million for NWS construction, which is an increase of $3.0 million for the WFO construction program. This increase would speed completion of the ongoing NWS Facilities Construction program, including Alaska facilities modernization and necessary corrective actions at NWS Weather Forecast Offices nationwide. The proposed acceleration will complete the program several years earlier (FY 2008 vs FY 2013), delivering an acceptable working and living environment to NWS employees quicker and saving approximately $4 million in inflation and program management costs. $10.4 million is requested for the building of a NOAA Center for Weather & Climate Prediction in suburban Maryland. This new building would house the National Centers for Environmental Prediction as well as offices for OAR and NESDIS. These funds are needed to award a facility construction design/build contract to be managed by GSA and fully provide for the above-standard construction costs for the project, ensuring building occupancy by 2007.

Fleet and Aircraft Maintenance and Upgrades

This request includes an increase of $3.3 million in Operations, Research and Facilities (ORF) and a decrease of $51.1m in Procurement, Acquisition and Construction (PAC) accounts. The ORF increase provides $2.0 million to operate and maintain FAIRWEATHER to collect hydrographic data in Alaska, $0.5 million to increase the strength of the NOAA Corps to support NOAA ships, aircraft and Line Office programs, $0.5

FY2004 Highlights

Infrastructure, Maintenance, Safety and Human Capital Budget

This theme covers current infrastructure requirements, health, safety and security-related activities. This includes investment in NOAA's people so they can better deliver services and products to conduct NOAA's mission; safeguarding NOAA employees' health and safety through improvements and upgrades in NOAA's facilities and equipment; and maintaining and improving NOAA's data collection capability to meet program requirements. The theme request includes $248.4 million which is a $21.8 million increase from the FY 2003 President's Budget Request.

Program Changes

Facilities Repairs, Maintenance, Safety and Environmental Compliance

This includes an increase of $3.0 million for NOAA's Facilities Repair and Renewal program. It will provide funding for reduction of numerous health-and-safety deficiencies associated with many of NOAA's facilities. These funds will be applied to the current backlog of over $53.4 million in the Capital Renewal & Repair Program (CRR) projects list. An increase $2.0 million for NOAA's Safety and Environmental Compliance Program will allow NOAA to eliminate its existing backlog of environmental remediation projects in FY 2004 and begin to address widespread problems regarding asbestos and lead-based paint at NOAA facilities. Funding will also provide a complete inventory of all underground and aboveground storage tanks at NOAA facilities.

NWS Construction and NOAA Center for Weather & Climate Prediction

This includes an increase of $13.4 million for NWS construction, which is an increase of $3.0 million for the WFO construction program. This increase would speed completion of the ongoing NWS Facilities Construction program, including Alaska facilities modernization and necessary corrective actions at NWS Weather Forecast Offices nationwide. The proposed acceleration will complete the program several years earlier (FY 2008 vs FY 2013), delivering an acceptable working and living environment to NWS employees quicker and saving approximately $4 million in inflation and program management costs. $10.4 million is requested for the building of a NOAA Center for Weather & Climate Prediction in suburban Maryland. This new building would house the National Centers for Environmental Prediction as well as offices for OAR and NESDIS. These funds are needed to award a facility construction design/build contract to be managed by GSA and fully provide for the above-standard construction costs for the project, ensuring building occupancy by 2007.

Fleet and Aircraft Maintenance and Upgrades

This request includes an increase of $3.3 million in Operations, Research and Facilities (ORF) and a decrease of $51.1m in Procurement, Acquisition and Construction (PAC) accounts. The ORF increase provides $2.0 million to operate and maintain FAIRWEATHER to collect hydrographic data in Alaska, $0.5 million to increase the strength of the NOAA Corps to support NOAA ships, aircraft and Line Office programs, $0.5

million to allow compliance with International Maritime Organization requirements for training and certification of ships' complements, and $0.3 million for training and certification needed for aircraft regulatory and safety upgrades. The PAC change provides $1.3 million for equipment for aircraft regulatory and safety upgrades, $1.7 million to upgrade the navigation system on one of NOAA's "Hurricane Hunter" aircraft, a decrease of $3.2 million due to completion of major repairs on WHITING and a decrease of $50.9 million due to completion of construction of fisheries survey vessel (FSV2).

Human Capital

NOAA is requesting $3.0 million for E-Gov initiatives to make it easier for the public to use NOAA services. Funds will go to support government-wide disaster-related activities for preparedness, response, recovery, and mitigation, support for a government-wide Internet-based system for recreation, entertainment, vacationing, sightseeing, and related activities, support for E-Grants to make it easier for potential recipients to obtain information and apply for federal grants, and for Geospatial One Stop collection of government-wide geospatial data.

Funds of $2 million are requested for the Under Secretary and Associate Offices to be used as salaries to recruit for critical vacancies, and $1 million is requested for Program Planning and Integration (PP&I), to be used to provide salaries for vacant billets and provide office support to the staff.

million to allow compliance with International Maritime Organization requirements for training and certification of ships' complements, and $0.3 million for training and certification needed for aircraft regulatory and safety upgrades. The PAC change provides $1.3 million for equipment for aircraft regulatory and safety upgrades, $1.7 million to upgrade the navigation system on one of NOAA's "Hurricane Hunter" aircraft, a decrease of $3.2 million due to completion of major repairs on WHITING and a decrease of $50.9 million due to completion of construction of fisheries survey vessel (FSV2).

Human Capital

NOAA is requesting $3.0 million for E-Gov initiatives to make it easier for the public to use NOAA services. Funds will go to support government-wide disaster-related activities for preparedness, response, recovery, and mitigation, support for a government-wide Internet-based system for recreation, entertainment, vacationing, sightseeing, and related activities, support for E-Grants to make it easier for potential recipients to obtain information and apply for federal grants, and for Geospatial One Stop collection of government-wide geospatial data.

Funds of $2 million are requested for the Under Secretary and Associate Offices to be used as salaries to recruit for critical vacancies, and $1 million is requested for Program Planning and Integration (PP&I), to be used to provide salaries for vacant billets and provide office support to the staff.

National Weather Service Homeland Security-Facilities

Physical Security

The FY 2004 President's Budget includes an increase of $2.2M to enhance the security of National Weather Service (NWS) field offices to meet minimum Department of Justice (DOJ) requirements as part of NOAA's Homeland Security initiative.

Caribou, Maine WFO

Background

After the Oklahoma City bombing in 1995, all Government buildings were assessed for vulnerability/threat conditions and rated on a five-tiered scale. Most NWS facilities are rated at Level II, which requires:

- adequate lighting for parking areas with power backup,
- perimeter security, such as cameras,
- intrusion protection, such as high security locks,
- fire detection and suppression, and
- emergency power to critical systems.

Funding for this initiative is essential for NWS to maintain Level II Security at NWS field offices and to meet minimum DOJ requirements. This is also an integral part of NOAA's Homeland Security initiative.

The implementation plan for this initiative requires a series of one-time procurements plus recurring maintenance and technology. The NWS performed an agency wide assessment of its facilities and developed a list of outstanding security issues which must be addressed to comply with the level II requirements.

Key Activities

During FY 2004 the NWS will procure and install the following:

- Monitoring Systems at selected, remote Radar Data Acquisition sites

- Alarm/Monitoring Systems at 92 Weather Forecast Officers (WFOs)/National Centers (remaining 57 will be procured in FY 2005)

- Electronic/Cipher Door Locks at 149 WFOs/National Centers, and

- Upgrade Exterior Lighting at 149 WFOs/National Centers

Outcomes

Cost savings will occur by prevention of break-ins/larceny (which avoids cost of equipment replacement), prevention of disruptions to operations, and sustaining the ongoing capability to maintain equipment and keep it up to date. Enhancing physical security will avoid productivity losses resulting from disruptions to normal NWS operations. The absence of disruptions improves operational effectiveness. Implementation of new and improved security measures will give employees confidence in external physical security systems at NWS facilities. This initiative will allow NWS to achieve full compliance with Level II requirements.

Budget Summary

Initiative	FY 03 Request	FY 04 Request	Increase
Homeland Security-Facilities	-	2.2	2.2