

NOAA
STEWARDSHIP INFORMATION
DECEMBER 31, 2012

NOTE 23: STEWARDSHIP PROPERTY, PLANT, AND EQUIPMENT

This note provides information on certain resources entrusted to the Department and certain stewardship responsibilities assumed by the Department. The physical properties of Stewardship Property, Plant, and Equipment (Stewardship PP&E) resemble those of the General PP&E that is capitalized traditionally in the financial statements of federal entities. Due to the nature of these assets, however, valuation would be difficult and matching costs with specific periods would not be meaningful. Therefore, federal accounting standards require the disclosure of the nature and quantity of these assets. NOAA, NIST, and the Census Bureau are the only entities within the Department that have Stewardship PP&E. Additional information on Stewardship PP&E is presented in the Required Supplementary Information section.

Stewardship Marine Sanctuaries, Marine National Monuments, Conservation Area, and Habitat Focus Area:

NOAA maintains the following Stewardship PP&E, which are similar in nature to stewardship land:

National Marine Sanctuaries: In 1972, Congress passed the Marine Protection, Research, and Sanctuaries Act (Act) in response to a growing awareness of the intrinsic environmental and cultural value of coastal waters. The Act authorized the Secretary of Commerce to designate special nationally-significant areas of the marine environment as national marine sanctuaries. These protected waters provide a secure habitat for species close to extinction, and also protect historically significant shipwrecks and prehistoric artifacts. National marine sanctuaries are also used for recreation (e.g, boating, diving, and sport fishing), and support valuable commercial industries such as fishing and kelp harvesting. As of December 31, 2012, 13 National Marine Sanctuaries, which include both coastal and offshore areas, have been designated, covering a total area of nearly 19,000 square miles. Each individual sanctuary site (Monterey Bay, the Florida Keys, the Olympic Coast, and Channel Island are the largest four) conducts research and monitoring activities to characterize existing resources and document changes.

Papahānaumokuākea Marine National Monument: The majority of all coral reef habitats located in U.S. waters surround the Northwestern Hawaiian Islands (NWHI). Papahānaumokuākea Marine National Monument was designated by Presidential Proclamation in 2006 and overlays several previously designated protected areas and forges a co-management regime for the entire area. The overlaid protected areas comprising the monument are the NWHI Coral Reef Ecosystem Reserve (from 3 to 50 miles in federal waters from the corridor of islands of the NWHI); the National Wildlife Refuges (the islands, atolls and some federal waters; and the State of Hawaii Refuge and lands and waters. The Monument is co-managed by the Department of Commerce-NOAA with the Department of the Interior, and the state of Hawaii.

Rose Atoll Marine National Monument: On January 6, 2009, President Bush designated the Rose Atoll Marine National Monument in American Samoa. The monument includes the Rose Atoll National Wildlife Refuge. It also includes about 20 acres of land and 1,600 acres of lagoon and is one of the most pristine atolls in the world. The areas around the atoll support a dynamic

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reef ecosystem that is home to many land and marine species, many of which are threatened or endangered. The Department of the Interior has primary management responsibility of the atoll while NOAA has primary management responsibility for the marine areas of the monument seaward of mean low water, with respect to fishery-related activities regulated pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.) and any other applicable authorities. An intergovernmental committee comprised of NOAA, Department of the Interior, and the American Samoa Government has been established to develop and coordinate management strategies. NOAA is progressing with fisheries management strategies, and has begun the process to consider incorporation of the area into the Fagatele Bay National Marine Sanctuary.

Marianas Trench Marine National Monument: On January 6, 2009, President Bush designated the Marianas Trench Marine National Monument. The Monument consists of approximately 96,000 square miles of submerged lands and waters of the Mariana Archipelago. It includes three units: the Islands Unit, the waters and submerged lands of the three northernmost Mariana Islands; the Volcanic Unit, the submerged lands within 1 nautical mile of 21 designated volcanic sites; and the Trench Unit, the submerged lands extending from the northern limit of the Exclusive Economic Zone of the United States in the Commonwealth of the Northern Mariana Islands (CNMI) to the southern limit of the Exclusive Economic Zone of the United States in the Territory of Guam. No waters are included in the Volcanic and Trench Units, and CNMI maintains all authority for managing the three islands within the Islands Unit (Farallon de Pajaros or Uracas, Maug, and Asuncion) above the mean low water line. The Department of the Interior, in consultation with NOAA, has management responsibility for the monument. With respect to fishery-regulated activities regulated pursuant to the Magnuson-Stevens Fishery Conservation and Management Act and any other applicable authorities, however, NOAA has primary management responsibility, and, when necessary, consults with the Department of the Interior. The inaugural Marianas Trench Monument Advisory Council (MTMAC) meeting took place on June 5 and 6, 2012, in Garapan, Saipan. NOAA is progressing with fisheries management strategies, and is scoping for management plan development, in cooperation with the Department of the Interior.

Pacific Remote Islands Marine National Monument: On January 6, 2009, President Bush designated the Pacific Remote Islands Marine National Monument. The Pacific Remote Islands area consists of Wake, Baker, Howland, and Jarvis Islands, Johnston Atoll, Kingman Reef, and Palmyra Atoll, which lie to the south and west of Hawaii. With the exception of Wake Island, these islands are administered as National Wildlife Refuges by the Department of the Interior. They sustain many endemic species, including corals, fish, shellfish, marine mammals, seabirds, water birds, land birds, insects, and vegetation not found elsewhere.

The Department of the Interior has responsibility for management of the Monument in consultation with NOAA, including out to 12 nautical miles from the mean low water lines of Wake, Baker, Howland, and Jarvis Islands, Johnston Atoll, Kingman Reef and Palmyra Atoll, pursuant to applicable legal authorities. NOAA is progressing with fisheries management strategies, and is scoping to develop a Monument Management Plan in cooperation with the Department of the Interior.

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Aleutian Islands Habitat Conservation Area: On July 28, 2006, NOAA formally established the Aleutian Islands Habitat Conservation Area in Alaska, which covers nearly 370,000 square miles and may harbor among the highest diversity of deep-water corals in the world. The conservation area established a network of fishing closures in the Aleutian Islands and Gulf of Alaska, and protects habitat for deep water corals and other sensitive features that are slow to recover once disturbed by fishing gear or other activities. Six small areas that include fragile coral gardens discovered by NOAA Fisheries Service scientists are closed to all bottom-contact fishing gear. This effort is part of a network of new marine protected areas in Alaskan waters designed to protect essential fish habitat and prevent any further damage of the area.

Written policy statements or permit guidelines for the National Marine Sanctuaries and Monuments have been developed for the areas of acoustic impacts, artificial reefs, climate change, invasive species, and marine debris. Submarine cable policy was finalized in 2011. NOAA's Office of Marine National Sanctuaries may be updating artificial reefs policy to reflect recent information about the effects of artificial reefs on natural habitats. The Office of Marine National Sanctuaries answers the most frequently asked questions related to alternative energy and oil and gas policy decisions for national marine sanctuaries.

California's Russian River Watershed Habitat Focus Area: The Habitat Focus Area provides a framework for NOAA to think and act strategically across all programs to increase the effectiveness of our efforts to improve habitat conditions for fisheries, marine life, and coastal communities. To that end, NOAA is identifying places where its offices can effectively focus their resources to meet their habitat conservation mandates on a watershed scale.

Once the host of vibrant coho salmon and steelhead runs, the Russian River was a premiere recreational fishing destination. By 2000, coho salmon were virtually extinct from the river, and the remaining habitats are badly degraded. Under the Endangered Species Act, California's coho salmon are now listed as endangered, and steelhead are listed as threatened. Heavy demand for and competing uses of the river's water adds to the stress on fish. As a valuable resource for Sonoma and Mendocino County agriculture and viticulture, as well as domestic water supply, water extraction from the river and tributaries can leave fish stranded during periods of critical demand in the spring, summer, and early fall. Russian River Valley communities are also impacted by frequent flooding. Steep hills and numerous canyons make accurate rainfall predictions and flood forecasts difficult.

NOAA's expertise in flood and weather forecasting, integrated monitoring, habitat protection and restoration, stakeholder education, and coastal and ocean planning and management will be critical to addressing the issues that challenge this watershed.

Our goals in the Russian River watershed include:

- Rebuilding endangered coho and threatened Chinook and steelhead stocks to sustainable levels;
- Improving rainfall, flooding and frost forecasts in the Russian River watershed; and

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- Increasing community resiliency to flood damage and improved planning and water management strategies.

Building on its efforts in the Russian River, NOAA will begin to select Habitat Focus Areas in other coastal regions over the coming year, starting with Alaska and the Pacific Islands.

Heritage Assets:

Heritage assets are unique for their historical or natural significance, for their cultural, educational, or artistic importance, or for their significant architectural characteristics. The Department generally expects that these assets will be preserved indefinitely. In cases where a heritage asset also has a practical and predominant use for general government operations, the asset is considered a multi-use heritage asset. The cost of a multi-use heritage asset is capitalized as General PP&E and is depreciated over the useful life of the asset.

NOAA has established policies for heritage assets to ensure the proper care and handling of these assets under its control or jurisdiction. The Deputy Under Secretary of NOAA established the Heritage Assets Working Committee to administer NOAA's stewardship policies and procedures. In carrying out these policies and procedures, the Working Committee:

- Maintains a nationwide inventory of heritage assets, ensuring that they are identified and recorded in the Personal Property Heritage Asset Accountability System;
- Establishes nationwide NOAA policies, procedures, and standards for the preservation, security, handling, storage, and display of NOAA heritage assets;
- Tracks and updates each loan of NOAA heritage assets, including assigning current values and inventory numbers, and reporting the current conditions of heritage assets;
- Determines the feasibility of new asset loans, such as meters, standard tide gauges, portraits, and books for exhibit loans; and
- Collects heritage assets and properties of historic, cultural, artistic, or educational significance to NOAA.

NOAA maintains the following Heritage Assets:

Galveston Laboratory: Galveston Laboratory is comprised of seven buildings that were originally part of Fort Crockett, Texas, an army coastal defense facility built shortly after 1900. These buildings are eligible for placement on the National Register. Due to their historic significance, exterior architectural features, and predominant use in government operations, the Galveston Laboratory is considered a multi-use heritage asset.

National Marine Fisheries Service (NMFS) St. George Sealing Plant: On St. George Island, in the Pribilof Islands group, Alaska, is the only remaining northern fur seal pelt processing building in the world. In 1986, the building was listed on the National Register of Historic Properties, within the Seal Islands National Historic Landmark. The Pribilof Islands commercial fur seal harvest was an extremely profitable business for the U.S. government, and, by the early

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1900s, had covered the purchase price of Alaska. The building is the largest on the island, and is comprised of four distinct work areas from the seal pelt processing area. In 1950, the original wood-framed pelt processing plant was destroyed in a fire and rebuilt in 1951 with concrete walls on remnants of the original foundation. Harsh weather and a lack of maintenance funding after the expiration of the Northern Fur Seal Convention in 1985 resulted in significant deterioration of the building by the early 1990s.

In November 1999, after numerous site surveys and assessments, the building's crumbling foundation was stabilized and the building's exterior was painted. This effort allowed for NOAA's continued, but limited, use of the building by the NMFS Alaska Region and Alaska Fisheries Science Center to achieve NOAA's mission on St. George Island. In addition, the U.S. Fish and Wildlife Service (USFWS) Alaska Maritime National Wildlife Refuge used the building as a bunkhouse until 2006, when NOAA's Safety Officer and the USFWS Safety Officer both determined the bunkhouse portion of the building lacked sufficient means of egress in the event of fire and deemed it to be unsafe for habitation. It was determined by USFWS that the cost of making the necessary modifications to the space was not fiscally justifiable. NOAA's Preserve America program funded an interpretive display project in the Seal Plant to promote public outreach and education for the modest tourism program on St. George.

NMFS Cottage M, St. George: The last remnants of the U.S. commercial harvest of northern fur seals can be found on St. George Island, in the Pribilof Islands group, Alaska. In 1986, Cottage M (locally known as Cottage C), was listed on the National Register of Historic Places within the Seal Islands National Historic Landmark. This building was constructed in the 1930s and was the residence of the island doctor and hospital through 1955, when the current clinic/hospital was built. Later, the construction of a health clinic on St. George Cottage M provided housing for government scientists and managers. In recent years, USFWS Alaska Maritime National Wildlife Refuge staff have also used the building. NMFS Cottage M is considered a multi-use heritage asset because of the critical housing for NOAA's research and management staff, along with USFWS staff.

NMFS St. Paul Old Clinic/Hospital: On St. Paul Island, in the Pribilof Islands group, Alaska, fewer historic structures remain than on St. George Island. In 1986, the clinic/hospital was listed on the National Register of Historic Places within the Seal Islands National Historic Landmark. The old clinic/hospital is the combination of three historic buildings (physician's house, 1929; dispensary, 1929; and hospital, 1934) connected in 1974 with an addition. The building was used as a clinic/hospital through 2006 under a Memorandum of Agreement between NMFS and the Department of Health, Education and Welfare, and later, the Indian Health Service/Bureau of Indian Affairs. Since August 2007, NMFS has maintained the facility. The facility is vacant and in significant need for repair before it can be utilized. During the winter of 2010, there was a freeze resulting in broken plumbing pipes and substantial flooding and icing throughout the building. All surface finishes on walls and most floors and most wall insulation have been removed. The electrical, heating, plumbing supply, waste drain, and fire sprinkling systems are non-functional. An engineering assessment has been completed which indicates that the north and south sections of the structure (built in 1929 and 1934) are in poor condition. The assessment recommended demolition vice repair of these sections due to the extensive amount of work

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required to bring these oldest portions of the structure to meet modern code compliance. The report recommended temporary shoring of the north and south sections to reduce the possibility of collapse until a decision is made with respect to the future renovation of the facility. NMFS will evaluate the cost-benefit of renovation of the facility to accommodate future needs on St. Paul Island.

NMFS Aquarium: In Woods Hole, Massachusetts, this aquarium was established in 1875 by Spencer Baird, the originator of NMFS. In addition to being part of the first laboratory of today's NMFS, this aquarium is the oldest marine research display aquarium in the world. It is used to educate the public, raise public awareness of NMFS activities, and accommodate in-house research for the Northeast Fisheries Science Center. The aquarium houses 16 permanent exhibition tanks and approximately 12 freestanding aquaria and touch tanks holding more than 140 species of fish and invertebrates and, on occasion, sea turtles. The facility also has an exterior seal habitat that currently exhibits non-releasable harbor seals obtained through the NOAA marine mammal stranding network. The tanks range in size from 75 to 2,800 gallons. NMFS Aquarium is considered a multi-use heritage asset because it is also used for NOAA's scientific research, which is part of its mission.

Office of Atmospheric Research (OAR) Great Lakes Environmental Research Laboratory (GLERL), Lake Michigan Field Station (LMFS): In Muskegon, Michigan, the GLERL main building, constructed in 1904 by the U.S. Life Saving Service, is eligible for National Register designation and has been recognized by state and local historical societies for its maritime significance. With the creation of the U.S. Coast Guard in 1915, the facility was transferred and served as a base for search and rescue operations for 75 years. In 2004, a renovation project was completed that restored the exterior to its original architecture and color scheme - a style that is considered rare. Today, GLERL carries out research and provides scientific products, expertise, and services required for effective management and protection of Great Lakes and coastal ecosystems. GLERL/LMFS includes three buildings and a research vessel dockage. The function of the field station is to provide a base of operations for GLERL's primary research vessel, which is presently the Research Vessel Laurentian, and to provide a focal point for GLERL's research on Lake Michigan. Due to its historic significance, exterior architectural features, and predominant use in government operations, GLERL/LMFS is considered a multi-use heritage asset.

Collection-type Heritage Assets: NOAA's collection-type heritage assets are comprised primarily of books, journals, publications, photographs and motion pictures, manuscripts, records, nautical chart plates, and artifacts. Many of these heritage assets are maintained by the NOAA Central Library (Library). As evidenced by a search of international catalogs, 35 to 50 percent of the Library's collection is unique. Historically, 40 percent of the items catalogued are not found anywhere else. Many older books cannot be replaced. The works include 17th century works of Francis Bacon and Robert Boyle, 18th century works of Daniel Bernouilli, Daniel Defoe, and Pierre Boucher, and 19th and 20th century works of Benjamin Franklin and George Washington Carver. The Library has an extensive collection of historical Coast and Geodetic Survey materials (from 1807) and Weather Bureau materials (from the 1830s), including foreign and historical meteorological data, information on instruments, and metadata.

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NOAA's collection-type heritage assets include items in the Thunder Bay Sanctuary Research Collection (Collection). In 2004, the Thunder Bay National Marine Sanctuary (jointly managed by NOAA and the State of Michigan to protect and interpret a nationally significant collection of shipwrecks and other maritime heritage resources) established an agreement with the Alpena County George N. Fletcher Public Library to jointly manage this Collection. Amassed over a period of more than 40 years by historian C. Patrick Labadie, the Collection includes information about such diverse subjects as Great Lakes ports and waterways, docks, cargoes, ships, shipbuilders, owners and fleets, machinery and rigging, notable maritime personalities, and shipwrecks. Special features of the Collection are extensive collections of a) data cards listing most of the ships on the Great Lakes before year 1900, a roster of some 15,000 vessels complete with descriptive data and highlights of the ships' careers and their ultimate losses; and b) ship photograph negatives of 19th and 20th century Great Lakes ships. Heritage assets also include copies of vessel ownership documents, contemporary ship photographs, books, and other items documenting the Great Lakes history.

NOAA's collection-type heritage assets also include items in the National Climatic Data Center Library. Heritage assets include a) books, manuals, and slides; b) thermometers, gauges, and radiosondes; and c) laboratory equipment.

Historical artifacts are designated collection-type heritage assets if they help illustrate the social, educational, and cultural heritage of NOAA and its predecessor agencies (Coast and Geodetic Survey, U.S. Fish Commission, the Weather Bureau, the Institutes for Environmental Research, the Environmental Science Services Administration, etc.). These include, but are not limited to, bells, gyrocompasses, brass citations, flags, pennants, chronometers, ship seals, clocks, compasses, fittings, miscellaneous ship fragments, lithographic plates, barometers, rain gauges, and any items that represent the uniqueness of the mission of NOAA and its predecessor agencies.

The NOAA Logistics Office continually conducts inventories of its collection-type heritage assets. Many items that were once classified as an individual collection are now included in existing collections. Other items are now deemed as not meeting the heritage asset criteria.

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Collection-type Heritage Assets					
Entity	Description of Assets	Quantity of Items Held 9/30/12	FY 2013 Additions	FY 2013 Withdrawals	Quantity of Items Held 12/31/12
NESDIS	Publications, books, manuscripts, photographs, and maps	59	0	0	59
National Ocean Service – Thunder Bay Sanctuary Research Collection	Data cards, photograph negatives, document copies, photographs, books, and other items	106,254	0	0	106,254
National Climatic Data Center	Artifacts, books, documents, and other	325		0	325
Others	Artifacts, artwork, books, films, instruments, maps, and records	3,431	1		3,432
Total		110,069			110,070

Additional information on the condition of the above Heritage Assets is presented in the Required Supplementary Information section.

REQUIRED SUPPLEMENTARY INFORMATION

Stewardship Marine Sanctuaries, Marine National Monuments, Conservation Area, and Habitat Focus Area:

NOAA maintains the following sanctuaries, marine national monuments, and conservation area, which are similar in nature to stewardship land and which are more fully described in Note 23, *Stewardship Property, Plant, and Equipment*, of the Notes to the Financial Statements.

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National Marine Sanctuaries: Marine sanctuaries provide protection for nationally significant natural areas, including species close to extinction, and protect historically significant shipwrecks and prehistoric artifacts. Each of the 13 sanctuaries, which may include habitats as diverse as near-shore coral reefs and open ocean, conducts research and monitoring activities to characterize existing resources and document changes. Resource status in the marine sanctuaries varies from good to poor, depending on resource type. Where conditions are compromised, they appear to reflect historical levels of use and development, and in some cases recent disturbances (e.g. diseases that have caused mass mortality of critically important species). The effects of recent disturbance may have been exacerbated by impaired environmental conditions in some areas. Human activities related to each of these threats are the focus of current management efforts, and favorable trends in resource quality appear to be the result of active management.

Papahānaumokuākea Marine National Monument: The majority of all coral reef habitats located in U.S. waters surround the Northwestern Hawaiian Islands (NWHI). The Papahānaumokuākea Marine National Monument, located off the coast of the NWHI, encompasses nearly 140,000 square miles of U.S. waters, including approximately 5,200 square miles of relatively undisturbed coral reef habitat that is home to more than 7,000 species. The condition of the Papahānaumokuākea Marine National Monument is good, but resources in the Monument are affected by an abundance of marine debris, and face emerging threats related to climate change (e.g. increasing temperature, acidification, and sea level).

Rose Atoll Marine National Monument: The atoll includes the Rose Atoll National Wildlife Refuge. It also includes about 20 acres of land and 1,600 acres of lagoon and is one of the most pristine atolls in the world. The areas around the atoll support a dynamic reef ecosystem that is home to many land and marine species, many of which are threatened or endangered. The condition of the Rose Atoll Marine National Monument is good, though it has apparently not recovered completely from the effects of a 1993 shipwreck and spill that altered community structure on a large portion of the reef.

Marianas Trench Marine National Monument: The Marianas Trench Marine National Monument consists of approximately 96,000 square miles of submerged lands and waters of the Mariana Archipelago. It includes three units: the Islands Unit, the waters and submerged lands of the three northernmost Mariana Islands; the Volcanic Unit, the submerged lands within 1 nautical mile of 21 designated volcanic sites; and the Trench Unit, the submerged lands extending from the northern limit of the Exclusive Economic Zone of the United States in the Commonwealth of the Northern Mariana Islands (CNMI) to the southern limit of the Exclusive Economic Zone of the United States in the Territory of Guam. The condition of the Marianas Trench Marine National Monument is good.

Pacific Remote Islands Marine National Monument: The Pacific Remote Islands area consists of Wake, Baker, Howland, and Jarvis Islands, Johnston Atoll, Kingman Reef, and Palmyra Atoll, which lie to the south and west of Hawaii. With the exception of Wake Island, these islands are administered as National Wildlife Refuges by the U.S. Fish and Wildlife Service of the Department of the Interior. They sustain many endemic species including corals, fish, shellfish,

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marine mammals, seabirds, water birds, land birds, insects, and vegetation not found elsewhere. The condition of the Pacific Remote Islands Marine National Monument is good.

Aleutian Islands Habitat Conservation Area: This conservation area in Alaska, which covers nearly 370,000 square miles, may harbor among the highest diversity of deep-water corals in the world, and protects habitat for deep water corals and other sensitive features that are slow to recover once disturbed by fishing gear or other activities. The condition of the Aleutian Islands Habitat Conservation Area is generally good, although some specific resources are threatened. For example, the conservation area contains six small areas of fragile coral gardens.

California's Russian River Watershed Habitat Focus Area: The Habitat Focus Area provides a framework for NOAA to think and act strategically across all programs to increase the effectiveness of our efforts to improve habitat conditions for fisheries, marine life, and coastal communities. To that end, NOAA is identifying places where its offices can effectively focus their resources to meet their habitat conservation mandates on a watershed scale.

Once the host of vibrant coho salmon and steelhead runs, the Russian River was a premiere recreational fishing destination. By 2000, coho salmon were virtually extinct from the river, and the remaining habitats are badly degraded. Under the Endangered Species Act, California's coho salmon are now listed as endangered, and steelhead are listed as threatened. Heavy demand for and competing uses of the river's water adds to the stress on fish. As a valuable resource for Sonoma and Mendocino County agriculture and viticulture, as well as domestic water supply, water extraction from the river and tributaries can leave fish stranded during periods of critical demand in the spring, summer, and early fall. Russian River Valley communities are also impacted by frequent flooding. Steep hills and numerous canyons make accurate rainfall predictions and flood forecasts difficult.

Collection-type Heritage Assets

NOAA's collection-type heritage assets are comprised primarily of books, journals, publications, photographs and motion pictures, manuscripts, records, nautical chart plates, and artifacts. Many of these heritage assets are maintained by the NOAA Central Library (Library). As evidenced by a search of international catalogs, 35 to 50 percent of the Library's collection is unique. Historically, 40 percent of the items catalogued are not found anywhere else. The Library has an extensive collection of historical Coast and Geodetic Survey materials (from 1807) and Weather Bureau materials (from the 1830s), including foreign and historical meteorological data, information on instruments, and metadata.

NOAA's collection-type heritage assets include items in the Thunder Bay Sanctuary Research Collection, composed primarily of a) data cards listing most of the ships on the Great Lakes before 1900, a roster of some 15,000 vessels complete with descriptive data and highlights of the ships' careers and their ultimate losses; and b) ship photograph negatives of 19th and 20th century Great Lakes ships.

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NOAA's collection-type heritage assets also include items in the National Climatic Data Center Library. Heritage assets include a) books, manuals, and slides; b) thermometers, gauges, and radiosondes; and c) laboratory equipment.

NOAA uses the Condition Assessment Survey (CAS) method to describe the condition of its assets. The CAS method is based on a five-point scale with 1 representing excellent condition; 2 – good condition; 3 – fair condition; 4 – poor condition; and 5 – very poor condition. Assets with the condition assessment level between 1 through 3 are defined as being suitable for public display. The books, journals, and other publications that make up the majority of the NOAA Central Library collection-type heritage assets are in 4 – poor condition, and 5 – very poor condition. The heritage assets of the Thunder Bay Sanctuary Research Collection are in 2 – good condition, and the heritage assets of the National Climatic Data Center Library are generally in 3 – fair condition.

REQUIRED SUPPLEMENTARY STEWARDSHIP INFORMATION

Stewardship Investments

Stewardship investments are substantial investments made by the federal government for the benefit of the nation, but are not physical assets owned by the federal government. Though treated as expenses when incurred to determine the Department's Net Cost of Operations, these items merit special treatment so that users of federal financial reports know the extent of investments that are made for the long-term benefit of the nation.

Investments in Non-federal Physical Property:

Non-federal physical property investments are expenses included in the Department's Net Cost of Operations for the purchase, construction, or major renovation of physical property owned by state and local governments. Based on a review of the Department's programs, NOAA and EDA have significant investments in non-federal physical property.

National Estuarine Research Reserves (NERR): The NERR system consists of 28 estuarine reserves protected by federal, state, and local partnerships that work to preserve and protect the nation's estuaries. The NERR system helps to fulfill NOAA's stewardship mission to sustain healthy coasts by improving the nation's understanding and stewardship of estuaries. Estuarine reserves are the areas where freshwater from rivers meet the ocean. These areas are known as bays, swamps, sloughs, and sounds. These important coastal habitats are used as spawning grounds and nurseries for the nation's commercial fish and shellfish. Estuaries filter much of the polluted runoff from rivers and streams that would otherwise contaminate oceans. The reserves were created with the passage of the Coastal Zone Management Act of 1972, and, as of December 31, 2012, encompassed approximately 1.4 million acres of estuarine waters, wetlands, and uplands. The most recent reserve, Lake Superior, WI, was designated on October 26, 2010. NERRs are state-operated and managed in cooperation with NOAA. NOAA's investments in non-federal physical property are for the acquisition of lands and development or construction of facilities, auxiliary structures, and public access routes for any NERR site.

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Coastal and Estuarine Land Conservation Program: This program was established under the Commerce, Justice, and State Appropriations Act of 2002, “for the purpose of protecting important coastal and estuarine areas that have significant conservation, recreation, ecological, historical, or aesthetic values, or that are threatened by conversion from their natural or recreational state to other uses.” The investments in non-federal physical property include matching grants awarded to state and local governments for land acquisition in coastal and estuarine areas. Since FY 2002, matching grants have been directed to 210 such projects.

Coastal Zone Management Fund: The Coastal Zone Management Program is authorized by the Coastal Zone Management Act of 1972, and administered at the federal level by NOAA’s Office of Ocean and Coastal Resource Management. The investments in non-federal physical property include incidental expenses of land acquisition, and low-cost construction on behalf of various state and local governments, for the purpose of preservation or restoration of coastal resources and habitats. NOAA’s financing supports various coastal states in their redevelopment of deteriorating and urbanized waterfronts and ports, as well as providing for public access to beaches and coastal areas. The state and local governments receive funding for these investments through NOAA grant expenditures, and these grant expenditures also include funding for purposes other than the investments in non-federal physical property. There is currently not in place a mechanism for the state and local governments to determine and report to NOAA the amount of monies they expend for the investments in non-federal physical property. The Department, accordingly, cannot report the amount of investments in non-federal physical property for the Coastal Zone Management Fund.

NOAA’s investments in non-federal physical property for FY 2009 through FY 2013 were as follows:

(In Millions)

Program	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Total
National Estuarine Research Reserves	\$11.7	\$14.7	\$5.5	\$3.9	\$2.1	\$37.9
Coastal and Estuarine Land Conservation Program	21.6	32.4	6.9	8.8	0.7	\$70.4
Total	\$33.3	\$47.1	\$12.4	\$12.7	\$2.8	\$108.3

Investments in Human Capital:

Human capital investments are expenses, included in the Department’s Net Cost of Operations, for education and training programs that are intended to increase or maintain national economic productive capacity and produce outputs and outcomes that provide evidence of the constant or increasing national productive capacity. These investments exclude education and training expenses for federal civilian and military personnel. Based on a review of the Department’s programs, the most significant dollar investments in human capital are by NOAA.

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National Sea Grant College Program: Sea Grant is a nationwide network, administered through NOAA, of 32 university-based programs that work with coastal communities. With the adoption in 1966 of the National Sea Grant College Act, Congress established an academic/industry/government partnership that would enhance the nation's education, economy, and environment into the 21st century. The program supports activities designed to increase public awareness of coastal, ocean, and Great Lakes issues, to provide information to improve management decisions in coastal, ocean, and Great Lakes policy, and to train graduate students in marine and Great Lakes science. The Knauss Fellowship Program offers qualified masters and doctoral students the opportunity to spend a year working on marine and Great Lakes policy issues with the Executive and Legislative branches of the federal government. The program currently has 43 fellowships awarded: 12 fellowships funded by the National Sea Grant College Program, and 31 fellowships funded by other NOAA offices and other federal agencies. There is also a Graduate Fellowship Program for Ph.D. candidates in the specialized areas of population dynamics and marine resource economics. The Graduate Fellowship Program currently has 17 fellowships awarded. Participants in this program can receive up to three years of funding.

National Estuarine Research Reserve Program: This program supports activities designed to increase public awareness of estuary issues, provide information to improve management decisions in estuarine areas, and train graduate students in estuarine science. The National Estuarine Research Reserve System's Graduate Research Fellowship (GRF) Program offers qualified masters and doctoral students the opportunity to address scientific questions of local, regional, and national significance. The result is high-quality research focused on improving coastal management issues. All GRF projects must be conducted in a National Estuarine Research Reserve and enhance the scientific understanding of the reserve's ecosystem. In FY 2012, 32 fellowships were awarded. In FY 2013, 0 fellowships have been awarded.

Educational Partnership Program: The NOAA **Educational Partnership Program (EPP)** with **Minority Serving Institutions (MSI)** provides financial assistance through competitive processes to minority serving institutions that support research and training of students in NOAA-related sciences. The program's goal is to increase the number of trained and graduated students from underrepresented communities in science and technology directly related to NOAA's mission. The EPP/MSI also seeks to increase collaborative research efforts between NOAA scientists and researchers at minority serving academic institutions. Financial assistance is provided through four competitive program components: the Cooperative Science Centers, the Environmental Entrepreneurship Program, the Graduate Sciences Program, and the undergraduate Scholars Program.

NOAA provides funding to eligible MSIs on a competitive basis to educate, train, and graduate students in NOAA sciences, particularly atmospheric, oceanic, environmental, living marine resources, remote sensing, and scientific environmental technology. NOAA EPP Cooperative Science Centers' goals are to:

- Train and graduate students, particularly from underrepresented communities, in NOAA mission sciences;
- Develop expertise in a NOAA scientific area;

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- Strengthen and build capacity in a NOAA scientific and management area
- Build research experience in a NOAA scientific and management area
- Increase graduation rates of students from underrepresented communities in NOAA mission sciences;
- Impact NOAA workforce statistics by increasing representation from underrepresented communities in NOAA mission sciences; and
- Leverage NOAA funds to build the education and research capacity at MSIs.

In FY 2012, the Cooperative Science Centers awarded 66 degrees to students, and continued to support 265 students in post-secondary NOAA mission-relevant science, technology, resource management, and policy degree programs. In FY 2013, the Cooperative Science Centes awarded ___ degrees to students, and continued to support ___ students in post-secondary NOAA mission-relevant science, technology, resource management, and policy degree programs.

The EPP/MSI Environmental Entrepreneurship Program (EEP) provides funding to eligible minority serving institutions on a competitive basis to engage students to pursue advanced academic study and entrepreneurship opportunities in the NOAA-related sciences. NOAA's EEP supports student training and experiential learning opportunities for the purpose of stimulating job creation and business development, and revitalizing local communities. EEP's objective is to increase the number of students at MSIs proficient in environmental business enterprises.

The Graduate Sciences Program (GSP) is aimed primarily at increasing opportunities for students in NOAA mission fields to pursue research and educational training in atmospheric, environmental, remote sensing, and oceanic sciences at MSIs when possible. GSP offers between two years (master's candidates) to four years (doctoral students) of NOAA-related research and training opportunities. GSP provides college graduates entry-level employment and hands-on research and work experience at NOAA. In FY 2012, 2 awards were made. In FY 2013, the program is not expecting to make any awards.

The Undergraduate Scholarship Program is designed to increase the number of students who undertake course work and graduate with degrees in the targeted areas integral to NOAA's mission. Appointments are for two years, and are made to students who have recently declared or are about to declare a major in atmospheric, oceanic, or environmental science. The students participate in research, training, and development activities at NOAA offices and facilities during two summer internships. In FY 2012, 11 students were selected for the program. In FY 2013, the program is planning to select approximately 11 students.

Ernest F. Hollings Undergraduate Scholarship Program: This program was established in 2005 to (1) increase undergraduate training in oceanic and atmospheric science, research, technology, and education, and foster multidisciplinary training opportunities; (2) increase public understanding and support for stewardship of the ocean and atmosphere and improve environmental literacy; (3) recruit and prepare students for public service careers with NOAA and other agencies at the federal, state, and local levels of government; and (4) recruit and prepare students for careers as teachers and educators in oceanic and atmospheric science and to

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improve scientific and environmental education in the U.S. In FY 2012, the program added 115 students. In FY 2013, the program is planning to add approximately 110 students.

Students live and attend universities across the U.S. They are majoring in the following science, technology, engineering, and mathematics fields: Mathematics; Meteorology; Engineering; Biology; Chemistry; Climatology; Computer Science; Earth Sciences; Economics; Science Teachers; Physical Sciences; and Science Policy.

Southeast Fisheries Science Center's Recruiting Training Research Program: This is a joint program between NMFS and the University of Florida. The program had resided at Virginia Tech before moving to the University of Florida in December 2011. The objectives of the program are the following: (1) to recruit top undergraduate and graduate students into the field of fisheries population dynamics and careers with NMFS; (2) to train graduate students; and (3) to conduct population dynamics and stock assessment research in support of the NMFS mission. The program also offers graduate courses and workshops in computer programming, simulation modeling, and fish population dynamics. In FY 2012, 15 outstanding undergraduate students from across the country participated in a week-long undergraduate workshop and the program supported three M.S. students. In the spring of 2012, two new graduate students (one M.S. and one Ph.D.) were recruited to begin their workshop in July 2012. In September 2012, an open house took place in Miami to enable the University of Florida community to meet the faculty, staff, students, and collaborators to visit the facility and learn about the work that the center does. Plans are moving forward for another undergraduate workshop in March 2013, and a newly designed summer program for Masters-level students from around the country is scheduled to take place in June 2013.

Northeast Fisheries Science Center (NEFSC) Partnership Education Program (PEP): The NEFSC of NOAA's National Marine Fisheries Service leads a consortium of six science institutions in Woods Hole, MA., offering a ten-week summer program that combines undergraduate course work with research in marine and environmental science. Launched in 2009, PEP is an ongoing diversity program designed to recruit talent from minority groups that are under-represented in marine and environmental sciences. PEP recruitment targets college students with priority given to entering juniors and seniors majoring in the natural sciences who have had some course work in marine and/or environmental science. The program includes a credit course taught in Woods Hole by research scientists from Woods Hole science institutions, student research projects, and presentation of research results in a one-day seminar. Participants receive financial support for tuition, travel, and room and board, as well as a stipend. In FY 2012, 16 students participated in the ten-week summer program. The program is expected to occur in FY 2013, but the level of student participation will depend on funding.

Northeast Fisheries Science Center Bradford E. Brown Student Internship Program: The NEFSC has named its student intern program after Dr. Bradford Brown, a retired NOAA Fisheries Service scientist who was a leader in recruiting young people into fishery science. The program is open to active undergraduate and graduate students. Research topics include population biology and dynamics, resource assessment and environmental surveys, taxonomy, physical and biological oceanography, social sciences, data management, larval fish/plankton

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ecology, large marine ecosystems, aquaculture, biotechnology, remote sensing, protected species, and apex predators. Summer positions are offered throughout NEFSC laboratories, which are located in Woods Hole, MA; Narragansett, RI; Milford, CT; Highlands, NJ; Washington, DC; and Orono, ME. In FY 2012, 16 students participated in the student intern program. The program is expected to occur in FY 2013, but the level of student participation will depend on funding.

Woods Hole Science Aquarium (WHSA) High School Intern Program: WHSA offers three summer programs for students who have completed grades 10, 11, or 12. The programs are run by WHSA staff, and are projects of the NEFSC of NOAA's National Marine Fisheries Service and the Marine Biological Laboratory. Interns selected for the five-week program work in the aquarium, help lead public collecting walks, and participate in the Careers in Marine Science seminars. The one and two-week Careers in Marine Science seminars consist of short presentations by marine scientists, activities, and field trips that introduce students to marine-related careers. All students learn basic animal husbandry and aquarist skills, visit the local Woods Hole research institutions, meet with working scientists in a variety of fields, and visit area aquariums, zoos, and waterfronts. In FY 2012, 16 students will participate in one of the three summer programs. The program is expected to occur in FY 2013, but the level of student participation will depend on funding.

Pacific Islands Fisheries Science Center (PIFSC) Student Intern Program (PSIP): PSIP offers qualified college students professional work experience and formal training opportunities tailored to meet their educational and professional goals and interests. PSIP is a paid, summer-long (8-12 weeks) program that combines on-the-job training, formal training, one-to-one mentoring, and developmental assignments at PIFSC. Internship opportunities are established in specific PIFSC projects. Program components include:

- Performance Plans to establish goals and timelines for the intern's work assignments (established in meetings between intern and mentor)
- Periodic meetings between intern and mentor to check on progress (includes a mid-point review and final review)
- Inclusion of intern in PIFSC staff activities (division meetings, all-hands meetings, training, and other activities)
- Program wrap up: Interns and mentors hold a final meeting to review final products and discuss the internship experience
- Evaluations: Interns and mentors complete a program evaluation to provide feedback that will help PIFSC improve the structure of the internship program

In addition to the individual and group mentoring by PIFSC staff, PSIP interns are encouraged to synergize with each other and with other undergraduate and graduate interns at PIFSC. In FY 2012, PIFSC scientists hosted 3 undergraduate summer interns: 2 in PIFSC's Protected Species Division, and 1 in the Fisheries Research and Monitoring Division. In FY 2013, PIFSC scientists are anticipating hosting three undergraduate summer interns.

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The following table summarizes NOAA's investments in human capital for FY 2008 through FY 2012:

(In Millions)

Program	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Total
National Sea Grant College Program	\$0.7	\$0.9	\$0.8	\$0.7	\$0.2	\$3.3
National Estuarine Research Reserve Program	1.0	1.3	1.5	1.5	0.3	\$5.6
Educational Partnership Program	15.0	14.3	14.3	12.5	12.5	\$68.6
Ernest F. Hollings Undergraduate Scholarship Program	3.6	4.6	4.5	4.9	4.9	\$22.5
Southeast Fisheries Science Center's (SEFSC) Recruiting Training Research (RTR) Program	0.4	0.5	0.5	0.5	0.5	\$2.4
Northeast Fisheries Science Center Partnership Education Program (PEP)			0.18	0.18		\$0.36
Northeast Fisheries Science Center Bradford E. Brown Student Internship Program			0.15	0.15		\$0.30
Woods Hole Science Aquarium High School Intern Program			0.03	0.03		\$0.06
Pacific Islands Fisheries Science Center (PIFSC) Student Intern Program (PSIP)			0.02	0.02	0.02	\$0.06
Total	\$20.7	\$21.6	\$21.98	\$20.48	\$18.42	\$103.18
N/A = Not Applicable						

The following table further summarizes NOAA's human capital investments for FY 2009 to FY 2013 by performance goal:

(In Millions)

Performance Goal	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Protect, Restore, and Manage the Use of Coastal and Ocean Resources	\$20.7	\$21.6	N/A	N/A	
Enhance scientific knowledge and provide information to stakeholders to improve innovation, technology, support economic growth and improve public safety	N/A	N/A	\$21.98	\$20.48	\$18.42

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Investments in Research and Development (R&D):

Investments in R&D are expenses that are included in the Department's Net Cost of Operations. The investments are divided into three categories: (1) basic research, the systematic study to gain knowledge or understanding of the fundamental aspects of phenomena and of observable facts without specific applications toward processes or products in mind; (2) applied research, the systematic study to gain knowledge or understanding necessary for determining the means by which a recognized and specific need may be met; and (3) development, the systematic use of the knowledge and understanding gained from research for the production of useful materials, devices, systems, or methods, including the design and development of prototypes and processes. The investments are made with the expectation of maintaining or increasing national economic productive capacity, or yielding other future economic or societal benefits. Based on a review of the Department's programs, the only significant investments in R&D are by NIST and NOAA.

NOAA conducts a substantial program of environmental R&D in support of its mission, much of which is performed to improve the United States' understanding of and ability to predict environmental phenomena. The scope of research includes:

- Improving predictions and warnings associated with the weather, on timescales ranging from minutes to weeks;
- Improving predictions of climate, on timescales ranging from months to centuries; and
- Improving understanding of natural relationships to better predict and manage renewable marine resources and coastal and ocean ecosystems.

NOAA also conducts research that is intended to provide a solid scientific basis for environmental policy-making in government. Examples of this research include determining the stratospheric ozone-depleting potential of proposed substitutes for chlorofluorocarbons (CFCs), and identifying the causes of the episodic high rural ozone levels that significantly damage crops and forests.

NOAA conducts most R&D in-house; however, contractors to NOAA undertake most systems R&D. External R&D work supported by NOAA includes that undertaken through federal-academic partnerships such as the National Sea Grant College Program, the Cooperative Institutes of the Environmental Research Laboratories, the Climate and Global Change Program, and the Coastal Ocean Program.

Here is a brief description of the major R&D programs of NOAA:

Environmental and Climate: The Office of Oceanic and Atmospheric Research is NOAA's primary research and development office. This office conducts research in three major areas: climate research; weather and air quality research; and ocean, coastal, and Great Lakes research. NOAA's research laboratories, Climate Program Office, and research partners conduct a wide range of research into complex climate systems, including the exploration and investigation of ocean habitats and resources. NOAA's research organizations conduct applied research on the upper and lower atmosphere as well as the space environment.

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Fisheries: NOAA's National Marine Fisheries Service (NMFS) is responsible for the conservation and management of living marine resources and their habitat within the Nation's Exclusive Economic Zone. NMFS manages these resources through science-based conservation and management to ensure their continuation as functioning components of productive ecosystems, while also affording economic opportunities and enhancing the quality of life for the American public. Fishery stocks and protected species are surveyed; catch, bycatch, incidental take, economic and social data are collected, and research is conducted to better understand the variables affecting the abundance and variety of marine fishes and protected species, their habitat, and the benefits they provide to society. Protection of endangered species, restoration of coastal and estuarine fishery habitats, and enforcement of fishery regulations are primary NOAA activities. The research and management of living marine resources is conducted in partnership with states, tribes, universities, other countries, international organizations, and a broad range of stakeholders who benefit from the use and existence of living marine resources and their habitat.

Marine Operations and Maintenance and Aircraft Services: These efforts support NOAA's programs requiring operating days and flight hours to collect data at sea and in the air. NOAA's Marine and Aviation Operations manage a wide variety of specialized aircraft and ships to complete NOAA's environmental and scientific missions. The aircraft collect the environmental and geographic data essential to NOAA hurricane and other weather and atmospheric research, conduct aerial surveys for hydrologic research to help predict flooding potential from snowmelt, and provide support to NOAA's fishery research and marine mammal assessment programs. NOAA's ship fleet provides oceanographic and atmospheric research and fisheries research vessels to support NOAA's strategic plan elements and mission.

Weather Service: The National Weather Service conducts applied research and development, building upon research conducted by NOAA laboratories and the academic community. Applied meteorological and hydrological research is integral to providing more timely and accurate weather, water, and climate services to the public.

Other Programs: As a national lead for coastal stewardship, National Ocean Service promotes a wide range of research activities to create the strong science foundation required to advance the sustainable use of precious coastal systems. Understanding of the coastal environment is enhanced through coastal ocean activities that support science and resource management programs. The National Environmental Satellite Data and Information Service, through its Office of Research and Applications, conducts atmospheric, climatological, and oceanic research into the use of satellite data for monitoring environmental characteristics and their changes. It also provides guidance for the development and evolution of spacecraft and sensors to meet future needs.

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NOAA's R&D investments by program from FY 2009 through FY 2013 were as follows:

(In Millions)

Program	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Total
Environmental and Climate	\$337.0	\$344.1	\$395.3	\$392.8	\$81.6	\$1,550.8
Fisheries	55.7	59.9	65.7	64.9	13.7	\$259.9
Marine Operations and Maintenance and Aircraft Services	38.4	34.3	34.3	33.3	7.7	\$148.0
Weather Service	58.4	53.9	54.7	36.4	9.4	\$212.8
Other	103.8	102.0	98.0	90.6	19.0	\$413.4
Total	\$593.3	\$594.2	\$648.0	\$618.0	\$131.4	\$2,584.9

The following table summarizes NOAA's R&D investments for FY 2008 through FY 2012 by R&D category:

(In Millions)

R&D Category	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	Total
Applied Research	\$491.3	\$452.4	\$439.6	\$426.5	\$91.0	\$1,900.8
Development	102.0	141.8	208.4	191.5	40.4	\$684.1
Total	\$593.3	\$594.2	\$648.0	\$618.0	\$131.4	\$2,584.9

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The following tables further summarize NOAA's R&D investments from FY 2013 back to FY 2009 by performance goal:

FY 2013			
Performance Goal	Applied Research	Development	Total
Enhance scientific knowledge and provide information to stakeholders to improve innovation, technology, support economic growth and improve public safety	\$32.2	\$2.3	\$34.5
Improve understanding of the US economy, society and environment by providing timely, relevant, trusted and accurate data, standards and services enabling entities to make informed decisions	9.9	3.2	\$13.1
Enhance weather, water, and climate reporting and forecasting	2.0	7.4	\$9.4
Support climate adaptation and mitigation	21.4	25.0	\$46.4
Develop sustainable and resilient fisheries, habitats, and species	12.5	1.2	\$13.7
Support coastal communities that are environmentally and economically sustainable	13.1	1.2	\$14.3
Total	\$91.1	\$40.3	\$131.4

(In Millions)

FY 2012			
Performance Goal	Applied Research	Development	Total
Enhance scientific knowledge and provide information to stakeholders to improve innovation, technology, support economic growth and improve public safety	\$148.1	\$9.9	\$158.0
Improve understanding of the US economy, society and environment by providing timely, relevant, trusted and accurate data, standards and services enabling entities to make informed decisions	45.2	12.6	\$57.8
Enhance weather, water, and climate reporting and forecasting	8.9	27.5	\$36.4
Support climate adaptation and mitigation	104.4	127.5	\$231.9
Develop sustainable and resilient fisheries, habitats, and species	56.1	8.8	\$64.9
Support coastal communities that are environmentally and economically sustainable	63.8	5.2	\$69.0
Total	\$426.5	\$191.5	\$618.0

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(In Millions)

FY 2011			
Performance Goal	Applied Research	Development	Total
Enhance scientific knowledge and provide information to stakeholders to improve innovation, technology, support economic growth and improve public safety	\$149.5	\$9.3	\$158.8
Improve understanding of the US economy, society and environment by providing timely, relevant, trusted and accurate data, standards and services enabling entities to make informed decisions	48.0	12.6	\$60.6
Enhance weather, water, and climate reporting and forecasting	17.8	36.9	\$54.7
Support climate adaptation and mitigation	101.2	141.4	\$242.6
Develop sustainable and resilient fisheries, habitats, and species	59.1	6.7	\$65.8
Support coastal communities that are environmentally and economically sustainable	64.0	1.5	\$65.5
Total	\$439.6	\$208.4	\$648.0

(In Millions)

FY 2010			
Performance Goal	Applied Research	Development	Total
Protect, Restore, and Manage the Use of Coastal and Ocean Resources Through an Ecosystem-based Management	\$218.4	\$6.8	\$225.2
Understand Climate Variability and Change to Enhance Society's Ability to Plan and Respond	125.1	84.0	\$209.1
Serve Society's Needs for Weather and Water Information	108.0	48.4	\$156.4
Support the Nation's Commerce with Information for Safe, Efficient, and Environmentally Sound Transportation	0.9	2.6	\$3.5
Total	\$452.4	\$141.8	\$594.2

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FY 2009			
Performance Goal	Applied Research	Development	Total
Protect, Restore, and Manage the Use of Coastal and Ocean Resources Through an Ecosystem-based Management	\$211.5	\$8.1	\$219.6
Understand Climate Variability and Change to Enhance Society's Ability to Plan and Respond	140.4	60.5	\$200.9
Serve Society's Needs for Weather and Water Information	138.9	32.7	\$171.6
Support the Nation's Commerce with Information for Safe, Efficient, and Environmentally Sound Transportation	0.5	0.7	\$1.2
Total	\$491.3	\$102.0	\$593.3