**STEWARDSHIP PROPERTY, PLANT, AND EQUIPMENT (*Footnote Disclosure*)**

Preservation of stewardship property, plant, and equipment (PP&E) promotes the Department’s mission of providing effective management and monitoring of our Nation’s resources and assets to support both environmental and economic health. The physical properties of stewardship PP&E resemble those of General PP&E that is capitalized traditionally in the Balance Sheet of 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.

***Stewardship National Marine Sanctuaries, Marine National Monuments, Conservation Area, Rookeries, and Habitat Blueprint***

Written policy statements or permit guidelines for the National Marine Sanctuaries and Marine National Monuments have been developed for the areas of acoustic impacts, artificial reefs, climate change, invasive species, and marine debris. 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. There were no stewardship asset withdrawals for this subcategory in FY 2021.

NOAA maintains the following stewardship assets:

**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 June 30, 2021, 14 National Marine

Sanctuaries, which include both coastal and offshore areas, have been designated, as follows:

|  |  |
| --- | --- |
| Name | Protected Area Square Miles |
| Channel Islands National Marine Sanctuary | 1,471 |
| Cordell Bank National Marine Sanctuary | 1,286 |
| Florida Keys National Marine Sanctuary | 3,803 |
| Flower Garden Banks National Marine Sanctuary | 160 |
| Gray’s Reef National Marine Sanctuary | 22 |
| Greater Farallones National Marine Sanctuary | 3,295 |
| Hawaiian Island Humpback Whale National Marine Sanctuary | 1,366 |
| Mallows Bay-Potomac River National Marine Sanctuary | 18 |
| Monitor National Marine Sanctuary | 1 |
| Monterey Bay National Marine Sanctuary | 6,094 |
| National Marine Sanctuary of American Samoa | 13,581 |
| Olympic Coast National Marine Sanctuary | 3,189 |
| Stellwagen Bank National Marine Sanctuary | 846 |
| Thunder Bay National Marine Sanctuary | 4,300 |
| Total | **39,432** |

**Marine National Monuments:** The Marine National Monuments were created to protect the abundant and diverse coral, fish, and seabird populations; to facilitate exploration and scientific research; and to promote public education regarding the value of these national treasures. The establishment of the Monuments provides the opportunity to protect areas of outstanding scientific, cultural, conservation, and aesthetic value, and provide for the long-term preservation of these natural and cultural legacies. There are currently five Marine National Monuments, as follows:

|  |  |
| --- | --- |
| Name | Protected Area Square Miles |
| Marianas Trench Marine National Monument | 96,714 |
| Northeast Canyons and Seamounts Marine National Monument | 4,913 |
| Pacific Remote Islands Marine National Monument | 490,534 |
| Papahānaumokuākea Marine National Monument | 582,578 |
| Rose Atoll Marine National Monument | 13,436 |
| Total | **1,188,175** |

Marine National Monuments are co-managed by NOAA and the Department of Interior’s U.S. Fish and Wildlife Service (USFWS) in cooperation with state and territorial agencies. The following legislation provides the authority for NOAA and USFWS to manage, monitor and/or evaluate marine national monuments at the federal level. This list is not inclusive.

* Antiquities Act (1906): Authorizes the President to declare by public proclamation historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with proper care and management of the objects to be protected.
* Endangered Species Act (1973): A 1973 Federal law, amended in 1978 and 1982, to protect troubled species from extinction. USFSW decided whether to list species as threatened or endangered. Federal agencies must avoid jeopardy to and aid the recovery of listed species. Similar responsibilities apply to non-federal entities.
* Fish And Wildlife Coordination Act (1934): Provides the basic authority for the National Marine Fisheries Service (NMFS) and USFWS's involvement in evaluating impacts to fish and wildlife from proposed water resource development projects. It requires that fish and wildlife resources receive equal consideration to other project features. It also requires that federal agencies that construct, license, or permit water resource development projects must first consult with the USFWS and NMFS and state fish and wildlife agencies regarding the impacts on fish and wildlife resources and measures to mitigate these impacts.
* Magnuson-Stevens Fishery Conservation and Management Act (1976; amended 2006): Calls for assessment and consideration of ecological, economic, and social impacts of fishing regulations on fishery participants and fishing communities in marine fishery management plans.
* Marine Mammal Protection Act (1972): Established to protect and manage marine mammals and their products (e.g., the use of hides and meat). The primary authority for implementing the act belongs to the NMFS and USFW. The Act prohibits the "take" of marine mammals, which is defined as "to harass, hunt, capture or kill, or attempt to harass, hunt, capture or kill any marine mammal." The term "harassment" is further defined as "any act of pursuit, torment or annoyance which has the potential to injure a marine mammal or marine mammal stock in the wild or has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering."

**Aleutian Islands Habitat Conservation Area:** On July 28, 2006, NOAA formally established the Aleutian Islands Habitat Conservation Area in Alaska, which covers nearly 370 thousand 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. To minimize the effects of fishing on Essential Fish Habitat, and more specifically to address concerns about the impacts of bottom trawling on benthic habitat (particularly on coral communities) in the Aleutian Islands, the North Pacific Fishery Management Council took action to prohibit all bottom trawling in the Aleutians, except in small discrete “open” areas. Over 95% of the management area is closed to bottom trawling. Additionally, six Habitat Conservation Zones with especially high density coral and sponge habitat were closed to all bottom-contact fishing gear (longlines, pots, trawls). To improve monitoring and enforcement of the Aleutian Island closures, a vessel monitoring system is required for all fishing vessels in the Aleutian management area.  NMFS implements this closure area through the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area and in Federal regulations at 50 USC 679.22(a)(14), *Aleutian Islands Habitat Conservation Area*.

**NOAA Habitat Blueprint:** NOAA has a responsibility for protecting habitat for fish, threatened and endangered species, marine mammals, and other natural resources within the coastal zone. Recognizing the need for more concerted efforts to conserve, protect, and restore habitat, NOAA developed the NOAA Habitat Blueprint to build on existing programs, prioritize its activities, and guide its future actions. This is being accomplished by creating Habitat Focus Areas. There are currently 10 Habitat Focus Areas, as follows:

* Biscayne Bay, FL
* Choptank River Watershed, MD/DE
* Kachemak Bay, AK
* Manell-GeusWatershed, GU
* Muskegon Lake, MI
* Northeast Reserves and Culebra Island, PR
* Penobscot River Watershed, ME
* Russian River Watershed, CA
* St. Louis River Estuary, MN/WI
* West Hawaii, HI

Work at these Habitat Focus Areas are completed via grant proposals that take a landscape-scale or watershed approach to implementing on the ground conservation efforts. Proposals must align with specific Habitat Focus Areas priorities. Project types, including habitat restoration/ conservation, science/research, long-term monitoring, technology/tool development, and outreach/education, will vary by Habitat Focus Area. All projects will support NOAA’s core missions of conserving coastal and marine habitats to support sustainable fisheries, protected resources, and coastal community resilience. Collaboration is encouraged with conservation partners and communities.

**Land in St. George and St. Paul, AK:** Stewardship land in St. George includes land housing a cottage, land housing a seal skin processing plant, and seven (7) rookeries.These rookeries are specific areas where Alaskan sea lions gather each year to mate and raise young, and are protected by regulation under the Endangered Species Act and the Marine Mammal Protection Act. Alaska Steller sea lions specifically were first listed under the Endangered Species Act in 1990, mandating NMFS to monitor their population. Stewardship land also includes five (5) rookeries in St. Paul, AK.

***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 federal government operations, the asset is considered a multi-use heritage asset. The cost of acquisition, improvement, reconstruction or renovation of a multi-use heritage asset is capitalized as General PP&E and is depreciated over its estimated useful life.

NOAA’s Line and Staff Offices are responsible for reviewing their real property portfolios and reporting real property heritage assets to NOAA’s Finance Office via quarterly data call submissions. NOAA’s Real Property Management Division reviews these submissions with the Finance Office for final determination as to whether or not the reported items should be included as heritage assets.

NOAA has established policies, procedures, and standards for the preservation, security, handling, storage, and display of NOAA personal property heritage assets to ensure the proper care and handling of these assets under its control or jurisdiction.  NOAA maintains a nationwide inventory of personal property heritage assets, ensuring that they are identified and recorded in the Personal Property Heritage Asset Accountability System.  Each loan of NOAA personal property heritage assets, including assigning values and inventory numbers, and reporting the current condition of heritage assets, is tracked and updated and the feasibility of new asset loans is determined.  In addition, NOAA collects personal property heritage assets of historic, cultural, artistic, or education significance to NOAA.

**Non-Collection-Type Heritage Assets:**

Non-collection-type heritage Assets maintained by NOAA currently include the following:

* NMFS Galveston Laboratory Buildings (5) in Galveston, TX;
* NMFS St. George Cottage (building) in St. George, AK;
* NMFS St. George Seal Skin Processing Plant (building) in St. George, AK;
* National Environmental Satellite, Data, and Information Services Buildings (8) in Gilmore Creek, Fairbanks, AK;
* Northwest Fisheries Science Center (building) in Seattle, WA;
* Office of Oceanic and Atmospheric Research (OAR) Air Resources Lab (building) in Oak Ridge, TN;
* OAR Great Lakes Environmental Research Laboratory/Lake Michigan Field Station (building) in Muskegon, MI;
* Western Regional Center Hangars (2) at the Water Resource Center in Seattle, WA (buildings);

For FY 2021, the major methods of withdrawal of NOAA’s non-collection-type heritage assets included \_\_\_\_\_. Other major methods of withdrawal include demolition, disposal, transfer, and sale.

Information regarding deferred maintenance and repairs for heritage assets is included in the *Required Supplementary Information (Unaudited)* section.

**Collection-type Heritage Assets:**

NOAA’s 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 artifacts include, but are not limited to: books, journals, publications, photographs, motion pictures, manuscripts, records, nautical chart plates, 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. NOAA’s Logistics Office continually conducts inventories of its collection-type heritage assets.

For FY 2021, the major methods of withdrawal of NOAA’s collection-type heritage assets included \_\_\_. Other major methods of withdrawal include destroyed, lost, missing, stolen, and donated/transferred to an entity outside of NOAA.

NOAA’s collection-type heritage assets include:

**NOAA Central Library:** Many of NOAA’s heritage assets are maintained by the NOAA Central Library. The holdings include artifacts, photographs, documents and motion pictures.

**Thunder Bay Sanctuary Research Collection:** The Thunder Bay National Marine Sanctuary (TBNMS) is jointly managed by NOAA and the State of Michigan to protect and interpret a nationally significant collection of shipwrecks and other maritime heritage resources. In 2004, TBNMS 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 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 ship photograph negatives of 19th and 20th century Great Lakes ships. The collection also includes copies of vessel ownership documents, contemporary ship photographs, books, and other items documenting the Great Lakes history.

**Florida Keys National Marine Sanctuary Collection:** The Florida Keys National Marine Sanctuary (FKNMS) collection-type heritage assets include artifacts from shipwreck and wrecking events occurring in the Florida Keys over a 500-year period. FKNMS is an abundant mixture of natural and cultural, historic resources.

The following table summarizes NOAA’s Collection-type Heritage Assets activity and balances, in actual quantities.

|  |
| --- |
| **Collection-type Heritage Assets** |
| **Entity** | **Description of Assets** | **Custodial Area #** | **Quantity of****Items Held****10/01/2020** | **FY 2021 Additions** | **FY 2021 Withdrawals** | **Quantity of****Items Held****12/31/2020** |
| NOAA Central Library |
|  | Collections of Photographs and Motion Pictures | Photographs and motion pictures | 54508N000 | 1 | N/A1 | N/A1 | 1 |
|  | Other items at NOAA Central Library  | Artifacts, documents, and other items | 54508N000 | 28 | 0 | 0 | 28 |
| National Ocean Service – Thunder Bay Sanctuary Research Collection | Data cards, photograph negatives, document copies, photographs, books, and other items | 5410ZE228 | 106,254 | 0 | 0 | 106,254 |
| Florida Keys National Marine Sanctuary | Artifacts | 5410ZE612 | 253 | 0 | 0 | 253 |
| Others | Artifacts, artwork, books, films, instruments, maps, and records | All others | 3,164 | 0 | 0 | 3,164 |
| **Total** |  |  | **109,700** | **0** | **0** | **109,700** |
| 1 N/A - Not applicable; this category is reported as one collection. |

***Management Discussion and Analysis (MD&A) – 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 has significant investments in non-federal physical property.

NOAA’s investments in non-federal physical property for FY 2020 and FY 2021 were as follows (in millions):

|  |  |  |  |
| --- | --- | --- | --- |
| **Program** | **FY 2021** | **FY 2020** | **Total** |
| National Estuarine Research Reserves | $4 | $4.5 | **$8.5**  |
| Coastal and Estuarine Land Conservation Program | 0 | 0 | **0** |
| **Total** | **$4** | **$4.5** | **$8.5** |

*Please explain any significant increase or decrease in investments in Non-federal physical property between FY 2020 and FY 2021.*

**National Estuarine Research Reserves (NERR):** NERR system consists of 29 estuarine reserves protected by federal, state, and local partnerships that work to preserve and protect the Nation’s estuaries. 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.

**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.

***Investments in Human Capital:***

These investments are 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. The most significant investments in human capital are by NOAA.

The following table summarizes NOAA’s investments in human capital for FY 2020 and FY 2021 (in millions):

|  |  |  |  |
| --- | --- | --- | --- |
|  | **FY 2021** | **FY 2020** | **Total** |
| Educational Partnership Program | $0 | $16.0 | **$16.0** |
| Ernest F. Hollings Undergraduate Scholarship Program | 0 | 5.4 | **5.4** |
| National Estuarine Research Reserve Program | 1.7 | 1.8 | **3.5** |
| National Sea Grant College Program | 0 | 1.2 | **1.2** |
| Other Programs | 0 | 0 | **0** |
| **Total** | **$1.7** | **$24.4** | **$26.1** |

*Please explain any significant increase or decrease in investments in human capital between FY 2020 and FY 2021.*

**Educational Partnership Program:**  The NOAA Educational Partnership Program with Minority Serving Institutions provides financial assistance through competitive processes to minority serving institutions that support research and training of students in NOAA-related sciences, through Cooperative Science Centers. The program’s goals include (1) increase the number of trained and graduated students, from underrepresented communities in science and technology, directly related to NOAA’s mission; and (2) increase collaborative research efforts between NOAA scientists and researchers at minority servicing academic institutions.

**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 improve scientific and environmental education in the United States.

**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 Margaret Davidson Fellowship Program places one graduate student at each of the nation’s 29 national estuarine research reserves. Through a research project, fellows will address a key coastal management question to help scientists and communities understand coastal challenges that may influence future policy and management strategies.

**National Sea Grant College Program:** This program works to create and maintain a healthy coastal environment and economy. The Sea Grant network consists of a federal/university partnership between NOAA and 34 university-based programs in every coastal and Great Lakes state, Puerto Rico, and Guam. 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. There is also a Graduate Fellowship Program for Ph.D. candidates in the specialized areas of population dynamics and marine resource economics.

***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:

* Basic Research, the systematic study to gain knowledge or understanding of the fundamental aspects of phenomena and observable facts without specific applications toward processes or products in mind;
* Applied Research, the systematic study to gain knowledge or understanding necessary for determining the means by which a recognized or specific need may be met; and
* 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, NOAA makes significant investments in R&D.

NOAA’s R&D investments by program from FY 2017 through FY 2021 were as follows (in millions):

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Program**  | **2021****Basic**  | **2021****Applied**  | **2021****Develop-ment** | **2021 Total**  | **2020** | **2019** | **2018** | **2017** | **Total** |
| Environmental and Climate | $0 | $132.9 | $21.2 | $154.1 | $531.2 | $536.5 | $488.6 | $452.5 | $2,162.9 |
| Fisheries | 0 | 15.4 | 4.8 | 20.2 | 68.7 | 58.8 | 60.1 | 57.7 | 265.5 |
| Weather Service | 0 | 0.8 | 5.6 | 6.4 | 18.3 | 22.1 | 19.5 | 20.7 | 87.0 |
| Other | 0 | 30.1 | 6.5 | 36.6 | 131.3 | 131.9 | 144.5 | 68.1 | 512.4 |
| **Totals**  | **$0.0** | **$179.2** | **$38.1** | **$217.3** | **$749.5** | **$749.3** | **$712.7** | **$599.0**  | **3,027.8** |

*Please explain any significant increase or decrease in R&D investments between FY 2020 and FY 2021.*

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

**Environmental and Climate:** The Office of Oceanic and Atmospheric Research’s (OAR) is NOAA’s primary R&D 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 wide-ranging research into complex climate systems, the exploration and investigation of ocean habitats and resources, and predicting severe weather events and hazardous conditions that threaten life, property, and economic well-being.

**Fisheries:** NOAA’s National Marine Fisheries Service (NMFS) supports sustainable fisheries and protected resources management included in the areas of improving aquaculture, improving fishery data collection and assessment, protected species science, techniques for reducing bycatch and other adverse impacts, adapting to climate change and other long term ecosystem change, and socio-economic research. Other examples of R&D are process-oriented studies to understand mechanisms that control reproductive success, population genetics and stock structure, animal behavior, biophysical modeling, and the functional value of habitat.

**Weather Service:** The National Weather Service (NWS) conducts applied research and development to support integrated water prediction. A primary goal is to expand and accelerate critical weather forecasting research to operation through accelerated development and implementation of current global weather prediction models, improved data assimilation techniques, and improved software architecture and system engineering.

**Other Programs:** As a national lead for coastal stewardship, NOAA’s National Ocean Service (NOS) supports research and development on the cartographic, hydrographic and oceanographic sciences that underpin mapping, observing, and modeling efforts. This R&D leads to new technologies, models, and products and tools. NOAA’s National Environmental Satellite Data and Information Service, Center for Satellite Applications and Research (STAR) accelerates the transfer of satellite observations of land, atmosphere, ocean, and climate from scientific R&D into routine operations, enabling NOAA to offer state-of-the-art data, products, and services to decision-makers. NOAA’s Spectrum Efficient National Surveillance Radar Program includes R&D activities to determine the feasibility of improving the efficiency and effectiveness of the spectrum use by federal radar operations.