

Department of the Interior
Natural Resource Conservation Achievement Award Winners for 2019 and 2020

The Natural Resource Conservation Achievement Awards are annual Department of the Interior (DOI/Department) honors awards that include up to eight categories of achievement that protect environmental resources.

Awardees for 2019 and 2020 include individuals or teams at: 1) the U.S. Geological Survey (one), 2) the U.S. Fish and Wildlife Service (six), 3) the Office of Surface Mining Reclamation and Enforcement (one), 4) the Bureau of Land Management (one), 5) the Bureau of Ocean Energy Management (two), and 6) the Bureau of Reclamation (one).

Below is a description of the Natural Resource Conservation Achievement Awards winners:

Good Neighbor - This category recognizes external engagement with state or local governments and regional communities to achieve conservation results.

FY19: Chesapeake Bay Nutria Eradication Project, Fish and Wildlife Service (FWS), Chesapeake Marshlands National Wildlife Refuge Complex, Team Award - DOI employees at Chesapeake Marshlands National Wildlife Refuge Complex.

Chesapeake Marshlands National Wildlife Refuge Complex (CMNWRC) Blackwater National Wildlife Refuge (BNWR) in Dorchester County, Maryland, has lost 5,000 acres of wetlands through a combination of nutria (invasive rodent) herbivory, sea-level rise, and land subsidence. Nutria accelerate and exacerbate the impacts of the other forces acting on the marsh by destroying wetland vegetation, thereby speeding up the rate of marsh loss. The Chesapeake Bay Nutria Eradication Project (CBNEP) is administered by the FWS Chesapeake Bay Field Office (CBFO) and Chesapeake Marshlands National Wildlife Refuge Complex and funded through the FWS Partners for Fish and Wildlife and Refuge programs. The U.S. Department of Agriculture's Animal and Plant Health Inspection Service Wildlife Services performs the eradication work through an interagency agreement with the FWS. Along with the Maryland Department of Natural Resources, these agencies lead the Nutria Management Team (NMT), which is the governing body for the CBNEP. Other partners on the Nutria Management Team include the Virginia Department of Game and Inland Fisheries, Delaware Division of Natural Resources and Environmental Control, and Tudor Farms.

Since its inception, the CBNEP has removed nutria from 250,000 acres on the Delmarva Peninsula. The CBNEP has completed phases of eradication where the large known concentrations of nutria have been eliminated and the nutria-infested watersheds were revisited to remove any animals that were missed. The CBNEP has provided training on its highly successful methods for nutria eradication to natural resource practitioners, including on National Wildlife Refuges, in the states of Washington, North Carolina, and California and the countries of South Korea and Israel. Methods developed by the Chesapeake Bay Nutria Eradication Project have been published in numerous journal articles, agency documents, and literature.

FY 20: Maintenance and Expansion of Fish Culture Programs with the Florida Fish and Wildlife Conservation Commission and Georgia Department of Natural Resources, FWS, Melaka National Fish Hatchery, Welaka, Florida - Team Award - DOI employees at Welaka National Fish Hatchery.

The Hatchery anticipated a significant loss in production due to the COVID-19 pandemic in 2020. Covid-19 staffing reductions resulted in below normal striped bass and hybrid striped bass broodstock collections from traditional partners. Through interagency cooperation,



Figure 1 Glenn Martin doing pond work.

however, the Welaka National Fish Hatchery was able to meet stocking goals for hybrid striped bass in the Saint Johns Riverway. The Welaka National Fish Hatchery collaborated with both Georgia and Alabama Natural Resources Departments to exchange and provide Atlantic strain pure striped bass to the Saint Johns Riverway and Gulf strain pure striped bass to the Lake Seminole Reservoir and Ochlockonee River drainage basin. These coordination efforts resulted in the combined stocking of 1,077,848 Atlantic strain pure striped bass and hybrid striped bass into the public

waters of Georgia and Florida, and 75,880 pure strain Gulf striped bass being stocked in Florida. The spring production season led to the development of new partnerships between Welaka, Georgia and Florida. Welaka produced 60,000 catchable channel catfish and bluegill for the state of Georgia. Florida utilized ponds at Welaka for a lake chubsucker program. These partnerships allowed several hatcheries to meet their goals for the season and strengthened relationships with neighboring stakeholders.

Environmental Review and Permitting Champion - Recognizes those that cut the amount of time normally needed to complete the environmental compliance process in a manner that fosters excellent decision-making.

FY 19: Ms. Deena Hansen, Improving Environmental Compliance for Marine Minerals Program Exploration Activities on the Outer Continental Shelf, Bureau of Ocean Energy Management, Office of Strategic Resources, Marine Minerals Division, Camarillo, California, Atlantic and Gulf of Mexico Outer Continental Shelf Individual Award - Ms. Deena Hansen, DOI employee.

Ms. Hansen was tasked with implementing new environmental review procedures while still maintaining the mission and overall environmental performance of BOEM's Marine Minerals Program. The hallmark of the Marine Minerals Program mission is to locate, characterize, and manage Outer Continental Shelf sand and other sediment resources for use in beach

Figure 2 Deena Hansen conducting Atlantic sturgeon tagging in the Delaware Bay.

nourishment and coastal restoration projects along eroding segments of the Nation's coastline. Critical to this mission is BOEM's oversight of geophysical and geological exploration activities in high-demand areas and associated environmental compliance responsibilities, whether BOEM authorizes third-party surveying or directly funds such activities. Ms. Hansen exemplified the spirit of an Interior "Environmental Review and Permitting Champion," by introducing several streamlining and strategic measures in FY 19. Her leadership ability, collaborative approach, excellent communications, and technical skill set resulted in the efficient preparation of a streamlined programmatic environmental assessment. She envisioned and executed a suite of follow-on tactics that ensure efficient implementation, customer-focused engagement, and coherent decision-making. The net impact of Ms. Hansen's contribution, leveraging that of others, led to significant reduction in lead time and preparation costs typically associated with environmental compliance. Further, she introduced several measures to improve communication within the Bureau and enhance our stakeholder's experience, all while ensuring a robust, yet flexible environmental mitigation framework across these critical survey activities. This helped the Bureau operate more efficiently while still addressing the Department's strategic goals of 1) ensuring access to mineral resources, 2) using science to support decisions and activities, and 3) reducing administrative burden.



Outdoor Recreation Champion - This category recognizes exceptional leadership to promote recreation, including hunting, fishing, and other forms of outdoor recreation on Interior lands and waters.

***FY 20: Ms. Kathleen Stinson, Region Accessibility Program Coordinator, Boise, Idaho
Prineville Reservoir Resort Continues - Still Enjoyed by Many Family Generations***, Bureau of Reclamation (Reclamation), Columbia-PacificNorthwest Region, Individual Award - Ms. Kathleen Stinson, DOI employee.

Ms. Stinson's exceptional leadership and expertise was proven in 2019 and 2020 when Prineville Reservoir Resort concessionaire contract was terminated with Reclamation seven years early, threatening the resort's ability to support the recreating public. This large resort was in jeopardy of being closed permanently to the public. Ms. Stinson was instrumental in securing Title 28 (The Federal Water Project Recreation Act of 1965, Public Law 89-72) grant funding that allows Reclamation to share the cost of operations and maintenance with a local managing agency partner. Thanks to Ms. Stinson's leadership, expertise and assistance in effective strategies, the resort was saved from demolition, and as of June 2020 is managed by

Oregon State Parks to remain open to the public in the future. With 700,000 visitors per year, this was a very successful project in meeting all the Department goals, statutes, public health and safety requirements and public expectations.

Natural Resource Stewardship - This category recognizes efforts to increase efficiency and/or cost savings in the use of materials, energy, water, or other resources and prevent or eliminate pollution from federal operations and buildings. The award includes efforts for improvements in building operation efficiencies, waste diversion and reduction, innovation, procurement of goods and services, and other pollution prevention and resource conservation efforts.

FY 19: Artificial Reef Construction, Fish and Wildlife Service, Bears Bluff National Fish Hatchery, South Carolina, Team Award - DOI employees at Bears Bluff National Fish Hatchery.

Eastern oyster habitat has been negatively impacted by erosion. The Bears Bluff National Fish Hatchery (BBNFH) partnered with local landowners to rehabilitate eastern oyster habitat through the construction of artificial reefs across the region. The Hatchery constructed artificial reefs from donated (recycled) shell, rehabilitating eastern oyster habitat, providing essential habitat for oysters, marine fish and invertebrates protecting saltwater marsh ecosystems from erosion, filtering nutrients, stabilizing sediments, and contributing detritus.

The team continued to go above and beyond regular duties and established pollinator habitat for monarch butterflies through the creation of native milkweed gardens. After several years of hurricanes and coastal flooding, BBNFH reused available fish tanks and scrap wood to construct raised-beds for milkweed. Seeds were germinated and sprouted in their 'off-grid' greenhouse which utilizes rain barrels to collect water and a solar panel to power the water pump.

In addition, BBNFH also incorporated environmental education and outreach into many of their projects and these efforts continued in FY 2019. They opened the facility for master naturalists' educational groups and welcomed fieldtrips from local schools and clubs, and visitors. Bears Bluff relies on partnerships and community involvement to construct oyster reefs. Among the essential partners in this process are local students and teachers, local non-government organizations and environmental non-profits, and volunteers.

FY 19: Paul Sarbanes Ecosystem Restoration and Poplar Island, Fish and Wildlife Service, Poplar Island, Maryland, Team Award - DOI employees on Paul Sarbanes Ecosystem Restoration and Poplar Island.

Due to sea level rise and erosion, a once 1,100-acre island was reduced to just two acres by 1998, losing great environmental value and habitat to a number of species. The Paul Sarbanes Ecosystem Restoration Project at Poplar Island is a 50-year environmental restoration that incorporates dredge material from the Chesapeake Bay into habitat for FWS trust resources. The dredged material is essential to maintaining Chesapeake Bay island habitat in the face of sea level rise. The partnership consists of the Maryland Port Administration, U.S. Army Corps of Engineers, Baltimore District, and the FWS. Over the last 20 years the partnership has enabled the restoration of island waterbird habitat, which is rapidly disappearing in the Chesapeake Bay.

It has also created essential stop-over habitat for priority shorebird populations such as Red knot and Herring Plover as well as a stopover and waystation for monarchs and other pollinators.

The partnership is evaluating the potential to support Black Rail and Salt Marsh Sparrow nesting habitat on the Island. In 1994, when the environmental impact statement for the project was completed, there were 11 species of birds observed on Poplar Island. As of May 2019, 239 avian species have been documented, 36 of which have been documented as nesting. There are an additional six species suspected of nesting on the island. Poplar Island has the most successful black-necked stilt population recorded in Maryland, and the largest colonies of endangered Common Terns and threatened Least Terns in the Maryland portion of the Chesapeake Bay.

Natural Resource Cleanup – This category recognizes efforts to clean up contamination on Department land through new and emerging technologies, partnerships with other federal or nonfederal agencies or organizations, project management or initiatives in areas such as bureau operations, land management practices, technology enhancement/transfer, education/training, policy making, program infrastructure development, or research.

FY 19: Friends of the Cheat, Champions of the Cheat River, Office of Surface Mining Reclamation and Enforcement Partnership, Cheat River and Lake, Preston County, West Virginia, Partnership Award for Friends of the Cheat, Sponsored by OSMRE.

For much of the 20th century, the Cheat River, its tributaries, and Cheat Lake were too polluted by acid mine drainage (AMD) to support more than bullhead catfish and suckers. With a pH of 4.5 and a deep orange iron staining, the main stem of the Cheat River was of little use to



Figure 3A picture of the Cheat River doldrums from Adam Webster

recreationists. Friends of the Cheat (FOC) is a partnership between government agencies, academia, industry, and environmental groups to bring resources, technology, and expertise together to address AMD and other problems in the Cheat River watershed. In the last 20 years, FOC has been awarded nearly \$1.5 million in funding through OSMRE to construct and operate AMD treatment systems at abandoned mine land (AML) sites within the Cheat River watershed. That funding has enabled FOC to leverage an additional \$4.3 million to construct 27 AMD treatment sites. These AMD treatment systems have helped raise the pH of Cheat Lake to around 7, from 4.5 pH. In 2019 the West Virginia Department of Natural Resources documented a naturally reproducing population of walleye with fish swimming as far upstream as the Cheat Canyon to spawn. In addition to the walleye, smallmouth bass have also made a comeback in the watershed, with Cheat Lake becoming one of the top producing bass tournament sites in the state. The Cheat is rebounding as a recreational hub in the wake of water quality improvements.

In 2018 and 2019, FOC applied and received two AML Pilotgrants (\$4,014,000) for the establishment of over 11 miles of rail trail and signage along the Cheat River. These projects, coined RE-CREATE and RE-CREATING, combine recreation, interpretation of local coal mining history, and education about AMD. The projects will also construct an AMD treatment learning park and support a Trail Town program to promote tourism, understanding of local mining history, and regional economic development. These efforts have resulted in the return of the whitewater rafting community, the reopening of the state's longest hiking trail, the 220- mile Allegheny Trail, and the redevelopment of 40 miles of water trail on the Cheat River. In just 26 years FOC has transformed the Cheat River and Cheat Lake from a liability to arecreational asset through its collaborative efforts in restoration, preservation, and promotion, resulting in a vibrant, thriving sports fishery and tourist attraction for West Virginia, assuring the legacy of this national treasure through collaborative stewardship and resource conservation.

Ralph Regula Conservation and Stewardship Champion - This category recognizes ~~to~~ that champion America's special places to ensure the legacy of these natural and cultural resource treasures endure through collaborative stewardship and resource conservation efforts.

FY 20: John D. Dingell, Jr. Visitor Center and Headquarters Building, FWS, Design Team, Detroit River International Wildlife Refuge, Michigan, Team Award- DOI employees on the Design Team, Detroit River International Wildlife Refuge.

In 2002, Wayne County Parks purchased 44 acres of industrial brownfield lands in Trenton, MI as the future home of the "Refuge Gateway" which includes new 11,800 square-foot Detroit River International Wildlife Refuge visitor center and headquarters building. This high-performance building was designed to save up \$17,700 annually, is ~~certified~~ by the U.S. Green Building Council as LEED Gold, and is the showpiece of the Refuge Gateway. It contains a highly efficient HVAC system, two energy recovery ventilating units, and high net metered 20 KW solar voltaic system and more that contribute to its ultra-low carbon footprint.

Community partnerships were essential in providing the refuge Gateway with a high-quality wildlife habitat. The new Visitor Center is in the heart of the Detroit metro area. On what was once the 44-acre site of an old Chrysler brake, paint, and solvent manufacturing plant now sits a revitalized wetland of national importance and a facility that provides recreational opportunities for over 4 million people in the Detroit metropolitan area. It is the only project in the world to successfully clean up an industrial brownfield site to serve as an ecological buffer. The site has achieved recognition as a Ramsar "Wetland of International Importance."

Trailblazer - Recognizes agents of change working across organizational boundaries or bureaucratic silos to enhance conservation outcomes and create efficiencies by resolving mission conflicts at the regional level.

FY 19: Vessel Tracking Data Provisioning through MarineCadastre.gov-Making Data Work Beyond its Intended Use, Bureau of Ocean and Energy Management, U.S. coastal areas and the exclusive economic zone, Team Award - DOI employees at BOEM, Non-DOI employees at NOAA and contract individuals to NOAA.

Information regarding migration paths of endangered or threatened whale species, anthropogenic noise, and recreational fishing behavior have not been widely available or easy to obtain. Now this information, a spin off from the Automatic Identification Systems (AIS), is being used to inform large commercial vessels on how to protect our natural resources.

The AIS provides the mariner and the U.S. Coast Guard (USCG) with data to support law enforcement and collision avoidance using radio frequency transponders to warn vessels of their proximity to other vessels and obstructions. AIS are required on certain types, sizes, and weight classes of vessels. These vessel carriage requirements and recreational uses of AIS have expanded considerably over the last few years. Therefore, AIS is now the prevailing data layer used to track medium to large vessel movements and trends throughout the U.S. In 2010, BOEM attempted to work with the USCG to acquire and analyze historic AIS data to better understand the shipping trends and patterns in potential wind energy planning areas. BOEM found that the data, in its native format, was impossible to translate into a modern standard mapping system and file sizes were incredibly large. Since BOEM is the lead agency for the MarineCadastre.gov project, the BOEM Renewable Energy Program partnered with the MarineCadastre.gov team and the USCG to extract and convert the most valuable elements of the AIS data stream for agency and public use that could be utilized in contemporary GIS systems. The results of this action had positive unintended results that persist today. MarineCadastre.gov has been making its AIS points, track lines, and density products available to anyone who needs it for the last 10 years. It has been used in a multitude of applications including environmental analysis, ship traffic lane rerouting, project planning, risk analysis, and education. It is by far the most requested product from the marinecadastre.gov project. By providing the AIS data to the public, BOEM and NOAA help the USCG to minimize many of the small data requests that used to come in regularly and point those inquiries to the marinecadastre.gov site.

FY 19: Mr. Daniel Murphy, Fish and Wildlife Service, Chesapeake Bay Field Office, Maryland- Individual Award: Daniel Murphy, DOI employee.

Mr. Murphy manages the Nutria Eradication Project, whose task is to completely eradicate nutria (invasive rodent) from the Delmarva Peninsula. As the Coastal Program Supervisor, in the Division of Habitat Protection, Mr.



Figure 4 Dan Murphy Credit FWS

Murphy's job is to protect, restore, and enhance fish and wildlife habitat on public and private lands around the Chesapeake Bay. Mr. Murphy has secured millions of dollars of grant funding to protect hundreds of acres of refuge lands and other environmentally sensitive areas. In 2019, Mr. Murphy took the initiative to organize a partners' meeting at Patuxent Research Refuge to discuss policy changes and organize a landscape design process for southern Maryland. Partners included the Chesapeake Conservancy,

National Park Service, Maryland DNR, The Conservation Fund, The Nature Conservancy, Scenic Rivers Land Trust and Maryland Audubon. Currently on Maryland's Western Shore

Mr. Murphy has been working with Maryland Department of Natural Resources, The Nature Conservancy, and others to protect 40,000 acres in Southern Maryland for potential inclusion in the National Wildlife Refuge System. Because of Mr. Murphy's hard work and collaboration with many partners, all of the known nutria populations have been removed from over a quarter million acres of the Delmarva Peninsula.

FY 20: Ms. Peggy Olwell, Creating Resilient Public Lands - A Conservation Legacy Through Native Seed Collection and Restoration, Bureau of Land Management, National in Scope, Individual Award

Ms. Olwell played a central leadership role in the development of Seeds of Success (SOS), the U.S.'s national native seed collection program. In 2020, SOS celebrated its 20th anniversary and has realized a number of accomplishments where Ms. Olwell's role was instrumental. Ms. Olwell and associates have trained over 2,500 collectors, providing invaluable early career opportunities in the plant conservation field. Many interns and collectors have gone on to take permanent positions within BLM's Plant



Project, a public-private partnership in which incarcerated adults grow sagebrush for restoration projects on BLM lands.



Figure 5 Peggy Olwell has been instrumental in the growth of the BLM Seed Warehouse System as well as the development of seed procurement tools that can help all DOI agencies.

Conservation and Restoration Program, U.S. Fish and Wildlife Service, and U.S. Forest Service. Ms. Olwell has increased BLM and the Department's access to genetically appropriate seed and plant materials by her effective and insightful leadership of the BLM's Plant Conservation and Restoration Project. She has been responsible for establishing BLM's Native Plant Ecoregional Programs that focus on developing economies of scale for native seed production. Ms. Olwell developed the "Sagebrush in Prisons Project" --a public-

private partnership in which incarcerated adults grow sagebrush seedlings for BLM restoration projects throughout the Great Basin. Participating inmates gain valuable experience in native plant production and ecological education. Her work with the Fort Belknap Indian Community to combine SOS protocols with Traditional Ecological Knowledge for seed collection and restoration has also provided job and income opportunities for the Aaniiih and Nakoda Tribes. Ms. Olwell developed the Conservation and Land Management internship program to hire SOS collectors and botanical support staff at the Chicago Botanical Garden. Ms. Olwell is responsible for developing a restoration practitioner

training and certification course for BLM employees.

Ms. Olwell's career-long dedication to the resource and leadership of the Plant Conservation Alliance (PCA) culminated in development of the National Seed Strategy. She was among the founding Federal Agencies to establish an interagency Memorandum of Understanding to form the Federal Native Plant Conservation Committee in 1995.

Through her leadership, this program has increased BLM and DOI's access to genetically appropriate native seed and developed foundational science for land managers on the use native seed to restore ecosystems. She is responsible for creating, developing, and implementing the SOS and the BLM's NPMDBs that have shaped the national conversation for restoration.

FY 20: Monarch Conservation Science Partnership - An Interdisciplinary Working Group, USGS, La Crosse, Wisconsin, Team Award for DOI personnel from: USGS, FWS, NPS, and non-DOI personnel from: Iowa Department of Natural Resources, University of Arizona, University of Minnesota, UC Kansas, Iowa State University, University of Northern Iowa, University of Georgia, National Autonomous University of Mexico (UNAM), Washington State University, Colorado State University, Xerces Society, University of Illinois, Journey North, Missouri Prairie Foundation, and Association of Fish and Wildlife Agencies.

The Monarch Conservation Science Partnership (MCSP) was formed to address concerns relating to the migratory monarch butterfly, a species which has declined by more than 80% in the last two decades and has been considered for listing as Threatened under the Endangered Species Act. The MCSP, organized and led by the USGS, is a consortium of government scientists, land managers, conservation policy analysts, non-governmental conservationists, academic scientists, and citizen science program coordinators. Through the MCSP, science producers and users worked collaboratively to define research questions and to develop and deliver ecological research resulting in improved environmental decision-making for conservation of monarchs. The MCSP, for instance, conducted the extinction risk research used by the FWS to establish a minimum overwintering population size required to sustain the eastern migratory monarch; this standard was subsequently adopted as the trinational goal of Canada, U.S. and Mexico. The MCSP served as the model for the Trinational Science Partnership supported by the Trilateral Commission for Environmental Cooperation. The MCSP developed scenarios for the recovery of monarchs to former levels of abundance, leading to the highly publicized 'All Hands-on Deck' call for conservation effort across all sectors of society. This research provided a strong basis for the recently completed Candidate Conservation Agreement with Assurances that the FWS entered into with more than 45 companies in the energy and transportation sectors across 48 states –the largest agreement of its kind ever. Similarly, this research informed the Midwest Fish and Wildlife Agencies' Mid-America Monarch Conservation Strategy, a conservation planning effort spanning from the Dakotas through Kentucky and Ohio and from Canada through to Mexico.