



SPECIAL
PHOTO
ISSUE

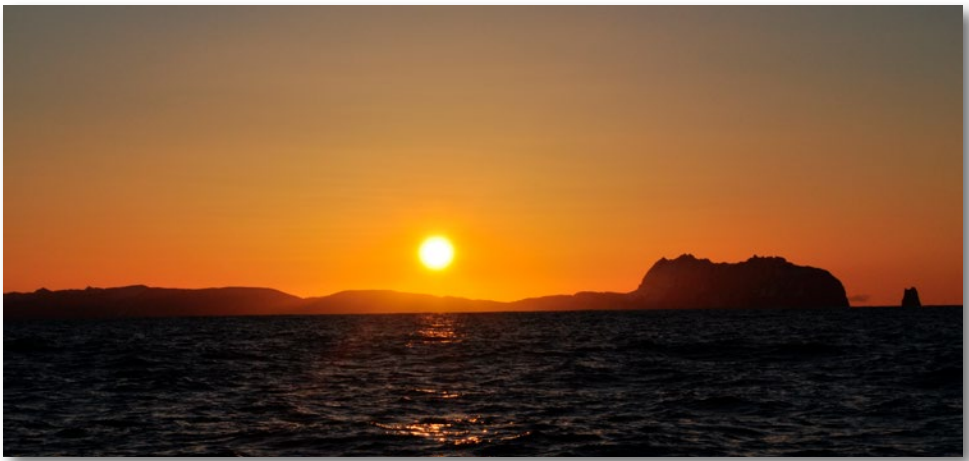
NEWSWAVE

FROM THE U.S. DEPARTMENT OF THE INTERIOR:
OCEANS, GREAT LAKES, and COASTS

Interior's Blue Portfolio

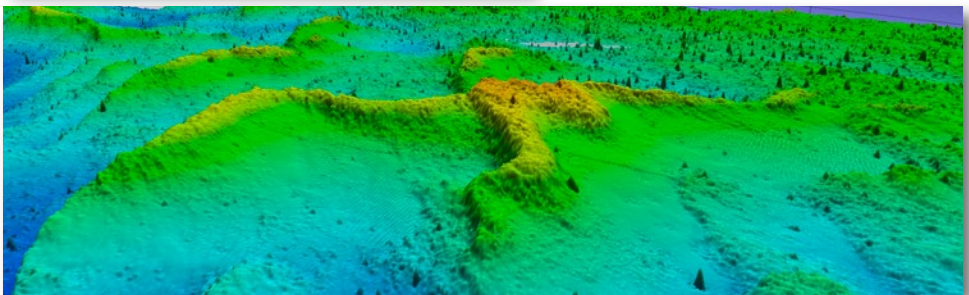
Summer 2018





Interior's Diverse Role:

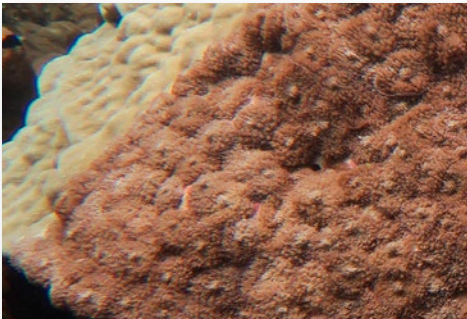
From managing energy resources to conserving wildlife, Interior is a proud steward of our nation's coastal and marine heritage and its unique cultural traditions for the benefit of the American people.



Front cover (top to bottom): Coastal erosion reveals the extent of ice-rich permafrost underlying the active layer on the Arctic Coastal Plain in the Teshekpuk Lake Special Area of the National Petroleum Reserve, AK. Photo credit: Brandt Meixell, USGS; USGS scientists use traditional seine nets along the bank of the Detroit River to assess the effects of collaborative aquatic habitat restoration efforts in this highly productive connecting channel of the Great Lakes with the Windsor, Ontario, skyline visible in the distance. Photo credit: Emily Galassini, USGS; Ofu Island in the National Park of American Samoa in the Pacific is one of the hidden gems of the National Park Service. Photo credit: Shaun Wolfe, Our World Underwater Scholarship Society (OWUSS). **This page (from top):** Sunrise behind Kayak Island, near the mouth of the Copper River, coastal Gulf of Alaska. Photo credit: John Crusius, USGS; Brown bears forage for razor clams and other invertebrates along exposed mudflats at Katmai and Lake Clark national parks. They use their long claws to get the razor clams out of the sediment and open the shells. Photo credit: Courtesy of Debi Ropken; The Gull Island Shoal is a well-known lake trout spawning area in Lake Superior's Apostle Islands but new bathymetry data found the shoal to have a complex, esker-like structure not indicated on nautical charts. This new map will be useful in restoring lake trout populations. Image credit: NPS



Through partnerships, expertise and commitment, we share responsibilities for a vast array of connected resources.



Clockwise from top left: The USFWS Coastal Program working with the Columbia Land Trust in East Willapa Bay, Washington, is conserving property to benefit local commercial and recreational fishing communities. Photo credit: Samantha Brook, USFWS; BSEE develops and enforces standards and regulations to enhance operational safety and environmental protection associated with offshore energy activities like those conducted on the Deepwater Asgard drillship. Photo credit: BSEE; Scientists use spotting scopes to monitor bear activity from a distance so as not to disturb them. Photo credit: Kaiti Chritz, NPS; An invasive anemone known as a corallimorph has a structure that looks very similar to the corals they invade. Photo credit: Thierry Work, USGS; The mighty claws of a tranquilized brown bear. NPS scientists use small slivers of claw to inform them about bear health and management. Photo credit: Kaiti Chritz, NPS



Our coastal waters are home to unique species and cultural treasures.



This page (clockwise from top): Tufted Puffin, the species most affected by a seabird die-off in the Pribilof Islands, AK, near Dutch Harbor in the Aleutian Islands, AK. Photo credit: Sarah Schoen, USGS; Least tern chick camouflaged in nesting area along the Gulf of Mexico coastline. Photo credit: Brian Rudinsky, USFWS; Endangered Florida manatee (*Trichechus manatus*) takes a breath at Crystal River National Wildlife Refuge, Florida. Photo credit: David Hinkel
Opposite page (Top): Endangered Florida manatees (*Trichechus manatus*) swim beneath the sun rays at Crystal River National Wildlife Refuge, Florida. Photo credit: David Hinkel; (Bottom): A park diver takes in the massive and awe-inspiring swim-through at Kalaupapa National Historic Park, Hawaii. Photo credit: Shaun Wolfe, OWUSS



From the tufted puffin to the manatee, we conserve and manage resources so these national treasures are healthy and accessible to the public. Come observe, explore, and learn.





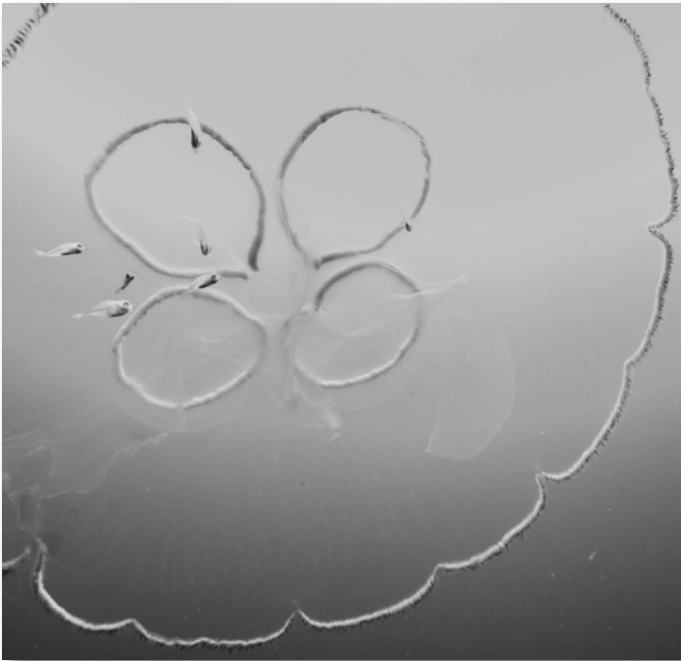
Top: When sockeye salmon first return to a river from their years at sea, their backs are a bright blue-green and their bellies flash pure silver. Photo credit: Lisa Hupp, USFWS; **Bottom:** Seafloor bathymetry map from an area off Texas showing where salt diapirs push up the seafloor creating discrete mounds. Image credit: Bill Shedd and Kody Kramer, BOEM



Top: In 2017, Hurricane Irma devastated the Virgin Islands National Park and Virgin Islands Coral Reef National Monument where many vessels were sheltered in Hurricane Hole, St. John, USVI. Photo credit: Caroline Rogers, USGS;
Bottom: When cold, walrus restrict blood flow to the outer layers of their skin and blubber to conserve heat. These walrus at Togiak National Wildlife Refuge, Alaska are warm and the increased blood flow turns them pink. Photo credit: USFWS



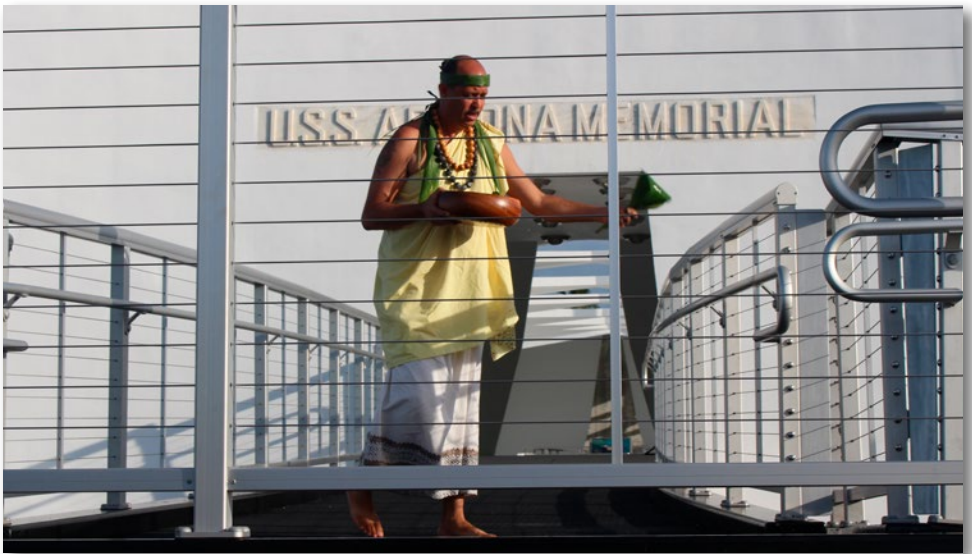
Water finds its way, connecting upland areas to our coasts and ocean, flowing through landscapes, wetland forests, subterranean caves, and into the individual cells of microscopic plants and animals.



This page (clockwise from top): The USGS 3D Elevation Program (3DEP) created this high-resolution elevation image by fusing lidar point cloud data with color imagery of Desecheo National Wildlife Refuge. The map helps USFWS manage this part of the Caribbean Islands NWR Complex in Puerto Rico. Image credit: Jason Stoker, USGS; Chains of single-celled algae called desmids live in Florida's Loxahatchee National Wildlife Refuge. Photo credit: Barry Rosen, USGS; Juvenile jacks take refuge inside of a moon jelly at Dry Tortugas National Park. Photo credit: Shaun Wolfe, OWUSS



Top: Cypress trees stand in the heart of Louisiana's swampland, the Atchafalaya Basin, the largest river swamp in the U.S. Photo credit: Ann Tihansky, USGS; **Bottom:** A specialized USGS diver within a section of the Ox Bel Ha cave system in Mexico where scientists are studying subterranean estuaries. Photo credit: © HP Hartmann



We are tied to our coastal landscapes through history, tradition, service, recreation, stewardship, and health.

Our coastal lands are of tremendous value to the nation.

Interior manages these resources responsibly, respectfully, and sustainably for future generations.



This page (clockwise from top): Loko'olu Quintero of the Hawaiian Church of Hawaii Nei blesses the new USS Arizona Memorial dock for the new USS Arizona Memorial in Hawaii, June 2016. Photo credit: NPS; The moat and seawall around Fort Jefferson at Dry Tortugas National Park affords the fort some protection from hurricanes and big swell. Photo credit: Shaun Wolfe, OWUSS; Paddlers enjoy the Wood-Pawcatuck Watershed in Rhode Island. Photo credit: USFWS; A least tern mother tends to her two chicks. Photo credit: Kaiti Titherington, USFWS



Clockwise from top: NPS manages the historic Fort Christiansvaern on St. Croix, USVI. Photo credit: Shaun Wolfe, OWUSS; Three species of algae found in the northern Everglades (from top): *Micrasterias furcate* var. *alata*, *Micrasterias radiosa*, *Xanthidium antilopaeum*. Photo credits: Barry Rosen, USGS; USGS scientists camp in blue tent (center of photo) while studying shoreline changes in the Arctic Coastal Plain, Alaska. Photo credit: Bruce Richmond/Ann Gibbs, USGS; Juvenile green sea turtle showing flipper tags that help identify it upon recapture. Photo credit: Kristen Hart, USGS



Coastal Connections— We all find our way to connect with Interior's Ocean, Great Lakes and Coasts

Clockwise from top left—Paddlers Bill Luther, David Smith, Jim Cole and Chuck Horbert benefit from dam removal on the Pawcatuck River. USGS Scientist Margaret Lamont rescues a cold-stunned green sea turtle. Kilonia Palauni of the Hawaiian Church of Hawaii Nei blows the traditional conch horn during a blessing ceremony. Visitors enjoy sunset at Coquille Point, Bandon Marsh National Wildlife Refuge, Oregon. USFWS Biologist Jenna Merry prepares samples for analysis.

