

US Army Corps

of Engineers ®

Update Report for Maine



New England District Current as of Jan. 31, 2021

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Home Page: <u>www.nae.usace.army.mil</u>

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| The missions of the New England District (District) of the U.S. Army Corps of | <u>Ecological Restoration</u> |
| Engineers include flood risk management protection, emergency | Minning |
| preparedness and response to natural disasters and national emergencies, | • <u>Mission</u> |
| environmental remediation and restoration, natural resource management, streambank and shoreline protection, navigation maintenance and | Navigation |
| improvement, support to military facilities and installations, and engineering | · · · · · · · · · · · · · · · · · · · |
| and construction support to other government agencies. The six New | <u>Conservation and</u> |
| England states cover 66,000 square miles, with 6,100 miles of coastline, 170 | Environment |
| federal navigation projects (13 deep draft commercial waterways), 13 major | International |
| river basins, and thousands of miles of navigable rivers and streams. The District operates and maintains 31 dams, three hurricane barriers and the | Interagency and International Support |
| Cape Cod Canal. Through its Regulatory program, it processes nearly 2,500 | oupport |
| applications per year for work in waters and wetlands of the six-state region. | <u>Regulatory Program</u> |
| We employ about 500 professional civilian employees, with about 300 | |
| stationed at our headquarters in Concord, Massachusetts. Other Army | <u>Special Studies</u> |
| Corps of Engineers employees serve at District projects and offices | - Support to EDA |
| throughout the region. For information on the District, please visit the website at: www.nae.usace.army.mil; on Twitter at: twitter.com/corpsnewengland or | <u>Support to EPA</u> |
| on Facebook at: facebook.com/CorpsNewEngland. | |
| | |

Navigation

BELFAST HARBOR, BELFAST (2nd CD) – The Belfast city manager requested the District initiate a study under Section 107 of the River and Harbor Act of 1960 to determine the feasibility of implementing a navigation improvement project for Belfast Harbor. Currently, Belfast Harbor contains a federal navigation project consisting of a 15-foot channel flanked by 8-foot, 10-foot and 13-foot anchorage areas. The town requested a study for construction of breakwaters across the outer harbor to further protect the harbor from wave action and storms. This improvement potentially would provide further protection of harbor anchorages and shore facilities and allow for expansion of commercial and recreational activities. Economic data was provided by the city of Belfast, waterfront facilities, and the commercial fishing fleet. A Federal Interest Determination (FID) was completed in August 2020 and found that project cost significantly outweighed benefits. The city was advised that further study was not warranted in December 2020.

BIDDEFORD POOL AND WOOD ISLAND, BIDDEFORD (1st **CD)** – The Biddeford Board of Selectmen initiated a maintenance request through the District in 2015 stating that a significant portion of the 6-foot anchorage and 10-foot channel had shoaled and were causing issues to local fishermen and the recreating public. The District completed sampling of the project in 2016 and is currently working on a draft Environmental Assessment to determine an appropriate placement location of dredged material. Environmental coordination with federal and state agencies began in January 2018 and led to a series of meetings concerning submerged aquatic vegetation in the Wood Island entrance channel. The District is currently compiling a matrix decision document to reduce, avoid, or mitigate the eelgrass resources which would need to be removed as a part of the maintenance dredging event. A public notice on the project is anticipated. Funding was provided in the Fiscal Year 2017 work plan in the amount of \$150,000 to complete environmental coordination, permitting and start plans and specification documents leading to a solicitation.

BLUE HILL HARBOR, BLUE HILL (2nd CD) – The Blue Hill Board of Selectmen requested the District initiate a study under Section 107 of the River and Harbor Act of 1960 to determine the feasibility of implementing a navigation improvement project for Blue Hill Harbor. Currently, the Blue Hill Municipal Wharf is accessible only at high tide. The town requested creating a navigation channel to the wharf to serve the fishing fleet. This improvement would provide full utilization of the harbor's existing facilities for commercial fishing vessels by reducing inefficiencies and encouraging growth of the lobster industry. An initial appraisal report of federal interest was approved by the District headquarters office. The District and the town executed a Feasibility Cost Sharing Agreement in June 2015. Work on the feasibility study is ongoing and a draft report is expected to be released early in 2020. A successful public meeting was held on March 3, 2020. The town provided additional funding in June 2020. A revised draft report has been prepared and is under review. State approvals (CZM and WQC) were requested in December 2020.

CAMDEN HARBOR, CAMDEN (1st CD) – The Camden Board of Selectmen requested the District initiate a study under Section 107 of the River and Harbor Act of 1960 to determine the feasibility of implementing a navigation improvement project for Camden Harbor. Currently, the Camden Harbor contains a federal navigation project consisting of an inner and outer anchorage. The town requested construction of breakwaters across the outer harbor to further protect the harbor from wave action and storms. This improvement potentially would provide further protection of harbor anchorages and shore facilities and allow for expansion of commercial activities. During the initial phases of this investigation, a depth survey in the vicinity of proposed breakwater locations was completed in 2012. In 2013, economic data that was requested from the town of Camden, waterfront facilities, and the commercial fishing fleet was compared with potential project costs to estimate and evaluate project cost-effectiveness. Economic justification was demonstrated by the analysis, and an initial appraisal report, Federal Interest Determination (FID) was completed in January 2016. The FID was provided to the town of Camden along with an estimate of the scope, cost, and cost-sharing requirements for a feasibility study. The town now has the opportunity to request that a full feasibility study be performed and would then co-sign a feasibility cost sharing agreement with the District and provide a 50 percent match to the feasibility analysis cost.

CAPE PORPOISE, KENNEBUNKPORT (1st CD) – The District completed dredging at the authorized project at Cape Porpoise Harbor. The FY2018 work plan included \$2.5 million to dredge the harbor. The project included dredging congressionally authorized portions of the FNP to include the 15-foot-deep Mean Lower Low Water (MLLW) channel and anchorage, and the 6-foot-deep MLLW channel. The 15-foot MLLW channel and anchorage were dredged to a depth of 10-feet MLLW and the 6-foot MLLW channel was dredged to authorized dimensions. Approximately 25,000 cubic yards of sediment was removed to allow project users to maintain safe navigation in these portions of the federal navigation project and return the 6-foot channel to authorized and maintained dimensions. Dredge material was placed at the Cape Arundel Disposal Site. The work was performed by a private contractor, Coastline Consulting & Development, LLC with dredging subcontracted to Patriot Marine, utilizing a mechanical bucket dredge with scows under contract to the government. Construction occurred between November 2019 and January 2020 and the harbor is now open to users.

GREAT CHEBEAGUE ISLAND (1st CD) – The town of Chebeague Island requested the District initiate a study under Section 107 of the River and Harbor Act of 1960 to determine the feasibility of implementing a navigation improvement project for Great Chebeague Island at the town's stone wharf landing. In July 2014, the initial study was completed, which indicated sufficient justification to draft a plan of improvement and develop a scope of work for detailed feasibility efforts. The District and the town then executed a feasibility cost sharing agreement in July 2016. Work on the feasibility study is ongoing, in which alternatives are being considered to dredge a federal navigation channel and turning basin to access the town-owned Stone Wharf. The draft detailed project report and draft Environmental Assessment are expected to be released in December 2020.

ISLE OF SHOALS HARBOR, NEW HAMPSHIRE (1st **CD) AND MAINE (1**st **CD) –** The Isle of Shoals Harbor federal navigation project (FNP) is located offshore of Rye, New Hampshire and Kittery, Maine. The Isle of Shoals Harbor FNP consists of three stone breakwaters connecting Star Island, Cedar Island, Smuttynose Island, and Malaga Island. The proposed project is focused on repairs to the breakwaters between Star Island and Cedar Island, and between Cedar Island and Smuttynose Island. Surveys have been completed and initial design and estimates are underway. The District expects to award a contract for repairs by the end of Fiscal Year 2021.

JOSIAS RIVER AT PERKINS COVE, OGUNQUIT, MAINE (1st CD) – The District is working on a maintenance dredging project for Ogunquit that would involve removal of about 10,000 cubic yards of material. Sampling of the shoals is scheduled to occur in 2020 with evaluation of potential placement locations to follow. As funds become

available a project Environmental Assessment (EA) will be developed and coordination with federal, state, and local resource agencies will commence. After the EA and all coordination efforts are completed, then dredging of the Josias River federal navigation project can be accomplished during the years that funds are appropriated.

KENNEBUNK RIVER, KENNEBUNK AND KENNEBUNKPORT (1st CD) – The federal navigation project (FNP) in Kennebunk and Kennebunkport consists of an 8-foot deep channel, 6-foot deep channel and two 6-foot deep anchorages. Shoaling has reduced some parts of the 8-foot deep entrance channel to unpassable depths making it difficult for vessel traffic to safely traverse the project. The District received supplemental funding in FY2019 for \$650,000 to undertake dredging of approximately 20,000 cubic yards of material from the 8-foot entrance channel. Environmental coordination supporting the project was completed and a water quality certification permit received in December 2019. The government dredge CURRITUCK started dredging operations on Jan. 3, 2020 and completed maintenance activities on Jan. 18, 2020. The material was placed at the previously used near shore environment off Gooch's Beach in Kennebunk. This FNP also consists of stone jetties and wingwalls to the east and west of the channel. The jetties and wingwalls received damage during winter Nor'easters in March 2018, triggering the need for repairs. The District received supplemental funding in FY2019 for \$2,100,000 to develop contract documents and undertake repairs to these stone structures. Design, real estate coordination, and environmental coordination supporting the project are currently ongoing and a contract is expected to be awarded in 2021 with construction likely occurring during the winter of 2021/2022.

PORTSMOUTH HARBOR AND PISCATAQUA RIVER, NEW HAMPSHIRE (1st **CD) AND MAINE (1**st **CD) –** This study of Portsmouth Harbor and the Piscataqua River, New Hampshire and Maine was directed by Section 437 of Water Resources Development Act of 2000. The non-federal sponsor is the state of New Hampshire, Pease Development Authority, Division of Ports and Harbors (PDA). The study's purpose is to determine the navigation related needs of the area and is focusing on the upper turning basin in the river near Newington, New Hampshire. The current 800-foot width of the turning basin causes major safety concerns for shippers and limits the efficiency of shipping operations, particularly for large Liquefied petroleum gas (LPG) tankers. The §905(B) reconnaissance report was completed and approved by North Atlantic Division in September 2004. A feasibility cost-sharing agreement for the PDA and District to share the cost of the feasibility study was executed on June 21, 2006. The feasibility study was initiated in 2006 using funds provided by the PDA and the Energy and Water Development Appropriations Act of 2006.

A draft Feasibility Report/draft Environmental Assessment was released for public review on March 31, 2014. The final Feasibility Report and Environmental Assessment were approved by the Civil Works Review Board on Aug. 21, 2014. State and agency review of the proposed Chief of Engineers' Report closed on Nov. 24, 2014. The final Chief of Engineers' Report was signed on Feb. 8, 2015 and the reports were submitted to Congress on June 15, 2015. Congress authorized the project in the 2016 Water Infrastructure Improvements for the Nation Act. The design phase cost sharing agreement between the District and the sponsor for the preconstruction, engineering, and design effort was executed Nov. 13, 2015. Federal and sponsor funds have been received and design phase work is 95% complete. This project is awaiting federal funding.

SACO RIVER AND CAMP ELLIS BEACH, SACO (1st CD) – The District, in response to a request from the city of Saco and state of Maine, has completed a study of potential solutions to erosion problems at Camp Ellis Beach. The study was conducted under the authority of Section 111 of the River and Harbor Act of 1968, as amended, which provides authority for the District to address mitigation of shore damages where the Corps navigation project has contributed to an erosion problem on adjacent shorelines.

A draft decision document and Environmental Assessment evaluating a range of options for Saco-Camp Ellis was published April 26, 2013 for public comment. The report recommended a shore damage mitigation project consisting of a 750-foot long spur jetty extending northerly off the existing north jetty at the river mouth, and placement of about 365,000 cubic yards of beachfill along the 3,250 feet of beach north of the jetty. The beach would require renourishment of about 116,000 cubic yards every 12 years.

While Section 111 typically limits a project to \$10 million in federal cost, Congress in the Water Resources Development Act of 2007 authorized the work at Camp Ellis to exceed this limitation, up to a federal cost of \$26.9 million, the estimated project cost at that time. Cost estimates today place the cost of the proposed plan at about \$31 million.

The District has prepared a final report that has scaled-back the proposed project's beachfill component to reduce the project cost to no more than the \$26.9 million authorized limit. It is currently estimated that construction of the spur jetty and placement of about 170,000 cubic yards of beachfill could be accomplished within the \$26.9 million authorized limit. The cost of future periodic renourishment is currently estimated at \$48 million escalated over the 50-year economic project life. Completion of the initial beachfill volume from the original plan, and future renourishment would be at the election and cost of non-Federal interests.

The revised report was submitted to District Headquarters for review at the end of April 2019; however, final approval required a letter of support from the non-federal project sponsor, the city of Saco. The city declined to support the project and further efforts on the Section 111 shore damage mitigation project have been terminated.

The District also is working on a project to dredge the authorized project for the Saco River. The President's Fiscal Year 2018 budget included \$4.2 million to dredge the river. The plan includes dredging the upper river using the government dredge MURDEN and contracting out the use of a hydraulic dredge to complete the areas of shoaling at the entrance to the river. All environmental permitting for the upper and lower river dredging has been completed. The MURDEN arrived on Nov. 17, 2017, and dredged shoal material for 30 days but ran into significant debris within the river slowing production and preventing this portion of the project being completed. All dredged material was placed in a previously used naturally deep scour hole approximately ½ mile down river of the dredge area. Preparation of plans and specifications to dredge the lower river with a hydraulic dredge are complete. An option to remove the remaining material at the head of navigation, which was not completed by the MURDEN in December 2017, by mechanical dredge is included in the solicitation.

A \$3.9 million contract was awarded Sept. 28, 2018, to H&L Contracting, Inc. LLC, of Bay Shores, New York. Approximately 41,000 cubic yards of required dredging, with another 36,000 cubic yards of 1-foot allowable over depth dredging would bring these areas back to authorized dimensions. Sandy shoal material dredged from the mouth of the river was pumped approximately 8,000 feet north to Camp Ellis Beach. Work was completed in spring 2019.

SEARSPORT HARBOR (2nd CD) – The District is working on a maintenance dredging project for Searsport that would involve removal of about 40,000 cubic yards of material. The sponsor, MaineDOT, has identified a potential upland area nearby that could hold the material. Additional sampling of the shoals will be obtained and will undergo testing. Based on conversations with the non-federal sponsor and the results of the testing, the District anticipates a decision on disposal site selection could be made soon. Assuming the material is suitable for the chosen site, the District will initiate completion of an Environmental Assessment and coordination with state and federal resource agencies this year.

STRATTON ISLAND (1st CD) – The National Audubon Society has requested a Section 204 Feasibility Study for beneficial use of dredge material from the Federal Navigation Project in Scarborough. The material would be used on Stratton Island which is owned by the Society to restore critical habitat of a growing population of endangered and threatened terns and the largest wading bird colony in the state of Maine. A Federal Interest Determination is currently underway.

UNION RIVER, ELLSWORTH (2nd CD) – The Ellsworth city manager and Harbor Commission have requested dredging of the Union River federal navigation project (FNP). The project consists of a 6-foot deep channel and 6-foot deep anchorage. Maintenance dredging of the project would require removal of approximately 65,000 cubic yards of material to restore the project to authorized dimensions. Sampling and testing of the dredged sediments has revealed that the material is unsuitable for open water placement. The District is currently evaluating dredged material management options, seeking to identify economic and environmentally acceptable options for managing disposal of the unsuitable dredged material. After a dredged material plan is finalized, the project will be in a position to move forward with plans to dredge the FNP, subject to available funding.

WELLS HARBOR (1st CD) – The town of Wells requested dredging of the entire Wells Harbor federal navigation project (FNP) due to severe shoaling of the channels, settling basins, and anchorage, with navigation into and out of the harbor hazardous at lower stages of the tide. Sediment sampling and testing occurred in 2019. As funds become available, a project Environmental Assessment will be developed and coordination with federal, state, and local resource agencies will commence. After the EA and all coordination efforts are completed, then dredging of the entire Wells Harbor FNP can be accomplished during the years that funds are appropriated.

The District received work plan funding in FY2020 for \$500,000 to undertake dredging of approximately 20,000 cubic yards of sandy material from the 8-foot entrance channel and settling basins. Environmental coordination supporting the project is ongoing, as is scheduling for the government dredge CURRITUCK to arrive in Wells for this work. Dredging of the entrance channel and settling basins will likely occur by the CURRITUCK in either the summer of 2020 or 2021 with material placed at the previously used nearshore environment off Wells Beach.

YORK HARBOR (1st CD) – A contract was awarded to Prock Marine Co. in October 2017 to conduct mechanical maintenance dredging in the two 8-foot-deep anchorages and a portion of the 10-foot-deep entrance channel. Several derelict moorings also were removed by the contractor. Both commercial fishing boats and recreational boats are moored in the harbor. The work consisted of the maintenance dredging of approximately 40,000 cubic yards of primarily fine-grain sand, silt, and clay, with more coarse-grain sand and gravel from the channel, returning the federal project to its authorized dimensions. The dredged material was placed at the Cape Arundel Disposal Site, about 14 miles away. The dredging started in late November 2017 and was completed in February 2018.

DISPOSAL AREA MONITORING SYSTEM (DAMOS) PROGRAM – The DAMOS program supports USACE's navigation mission by providing monitoring and management of dredged material disposal sites in New England waters to document compliance with the environmental and operational conditions placed on aquatic disposal of dredged material. The program also supports the beneficial re-use of dredged material through the development of placement techniques and monitoring. In Maine, this includes four regional disposal sites, a number of more infrequently used smaller sites, and several nearshore placement sites for beneficial re-use of dredged material. To better serve harbors in southern Maine, the DAMOS program and District staff supported EPA Region 1 over the past several years to designate a new regional disposal site and the Final Rule for designation of this site was published on Sept. 25, 2020 (see link below). The new Isles of Shoals North Disposal Site opened for dredged material disposal on Oct. 26, 2020. The DAMOS program surveyed this site in 2019 and collected additional baseline data from the site in 2020. In addition to the new site, the DAMOS program also surveyed the Cape Arundel Disposal Site off of southern Maine and performed sediment sampling at the Eastern Passage Disposal Site and the Douglas Island Disposal Site in Down East Maine during the fall of 2020. https://www.federalregister.gov/documents/2020/09/25/2020-21006/ocean-disposal-designation-of-an-ocean-dredged-material-disposal-site-for-the-southern-maine-new.

Ecological Restoration

NARRAGUAGUS RIVER AQUATIC ECOSYSTEM RESTORATION, CHERRYFIELD, MAINE (2nd CD) – The District is working with the town of Cherryfield, along with several environmental non-profit organizations, to modify the Cherryfield Dam for fish passage, restoring access to spawning and rearing habitat for several anadromous fish species. The study is being conducted under the authority of Section 1135 of the Water Resources Development Act of 1986, as amended, to modify federal projects to improve the environment. The District and the town of Cherryfield executed a feasibility cost share agreement in December 2018. The sponsor has provided funding that would allow the feasibility study to remain funded through year 2020, with the agreement that the sponsor will provide additional funding to carry the project to completion. The feasibility study began in June 2020, to allow time for the completion of an Ice Flow Modeling Study of the Cherryfield Dam by the Cold Regions Research and Engineering Laboratory (CRREL). This CRREL study will provide information that can be used to narrow the range of alternatives that are currently established for the feasibility study, thus, the District has opted to review the CRREL study before beginning the feasibility study.

NEW MEADOWS RIVER, BRUNSWICK & WEST BATH (1st CD) - The District received a request for assistance from the towns of Brunswick and West Bath to investigate opportunities for restoration of wetland habitat in the New Meadows River (NMR). Section 206 Aquatic Ecosystem Restoration, of the Water Resources Development Act of 1996, as amended, authorizes the Corps to carry out aquatic ecosystem restoration projects that will improve the quality of the environment, are in the public interest, and are cost-effective. The causeway at Bath Road (Brunswick) and State Road (West Bath) restricts the historical movement of tidally-influenced estuarine water between Casco Bay and NMR. The consequences of altering normal daily tides within the NMR have resulted in: (a) loss of intertidal and subtidal habitat, (b) loss of native salt marsh vegetation (i.e., Spartina alterniflora and S. patens), (c) loss of shellfish populations and federally protected eelgrass (Zostera marina) that support federally listed Shortnose Sturgeon and Atlantic Sturgeon, (d) creation of a niche for non-native invasive algae, and (e) negative consequences for other fish and wildlife resources due to habitat loss. A Federal Interest

Determination (FID) was completed in December 2019. The FID was provided to the towns of Brunswick and West Bath along with an estimate of the scope, cost, and cost-sharing requirements to complete the feasibility study.

PLEASANT RIVER SALT MARSH RESTORATION (2nd CD) – The District is working with the Maine Department of Transportation (MaineDOT) to restore up to 250 acres of salt marsh on the West Branch of the Pleasant River under the Section 206, Aquatic Ecosystem Restoration Program. The existing culverts under Ridge Road restrict tidal exchange to this former estuarine habitat. The District received funds in 2010 to begin the feasibility study. The District and the MaineDOT executed a Feasibility Cost Sharing Agreement in August 2011. Work on the feasibility study is ongoing and nearing completion, but the study cost has exceeded the original study cost estimate and additional funding has been requested from the sponsor.

ROYAL RIVER, YARMOUTH (1st CD) – The District received a request for Section 206 assistance from the town of Yarmouth to investigate opportunities for ecosystem restoration in the Royal River Watershed. The purpose of the proposed project is to assess the first two dams above the head of tide on the Royal River owned by the town of Yarmouth: the Bridge Street Dam and the East Elm Street Dam. Both dams have nonfunctioning fishways. The project has the potential to restore access to about 71 miles of river habitat for federally listed fish species and non-listed anadromous fish species, providing the fish with upstream access to historic reproductive habitat for adults and nursery habitat for the development of eggs and juvenile life stages. With Yarmouth's fish passage barriers addressed in the watershed, up to 135 miles of reproductive and nursery habitat may also be made accessible to migratory fish species, including blueback herring (Alosa aestivalis), alewives (Alosa pseudoharengus), American shad (Alosa sapidissima) American eel (Anguilla rostrata), sea run brook trout (Salvelinus fontinalis), brown trout (Salmo trutta), and sea lamprey (Petromyzon marinus). Restoring the fish passage on the Royal River will also benefit mammals and avian predators that prey upon fish species, likewise, water quality conditions may be expected to improve due the resumption of historic flushing patterns. A Federal Interest Determination is being prepared to investigate an aquatic ecosystem restoration project at the first two dams in the Royal River.

YARMOUTH HARBOR, YARMOUTH (1st CD) – The District received a request for Section 1135 assistance from the town of Yarmouth to investigate opportunities for restoration of wetland habitat in the Royal River. Approximately 2.8 acres of salt marsh habitat has been lost as a result of dredged material being placed, by the District, during construction of navigation improvements in 1966/1967. Approximately 199,000 cubic yards of material was placed into an adjacent wetland northeast of the anchorage. Since the original federal navigation project construction, maintenance dredging in 1976/1977 of 37,500 cubic yards of material, were also placed in the marsh. The consequences of the District filling adjacent wetlands with dredge materials in the 1960's and 1970's has resulted in the: (a) loss of intertidal and subtidal habitat, (b) loss of native salt marsh vegetation (i.e., Spartina alterniflora and S. patens), and (c) negative consequences for other fish and wildlife resources due to that habitat loss. A Federal Interest Determination is being prepared to investigate modifications to the marsh.

Special Studies

SILVER JACKETS HIGH WATER MARKS PROJECTS – The Blizzard of 1978 resulted in \$20 million in damage to public and private infrastructure due to coastal flooding, tidal surge, and high winds. After the event, the United States Geological Survey agency surveyed and cataloged approximately 100 high water marks (HWMs) along the coast. The purpose of this project is to locate and validate the accuracy of these existing HWMs, re-survey and/or re-establish better locations when appropriate, and photograph and provide that data to stakeholders. On May 18, 2019, the HWM signs were unveiled in the city of Portland and in the town of York. A similar project in the communities of Belfast, South Portland and Scarborough is underway. HWM locations have been validated and are in the process of re-surveying and re-establishing locations to place the signs in publicly visible and publicly owned infrastructure.

SILVER JACKETS FY2021 DYNAMIC COASTAL FLOOD INUNDATION PROJECT -- This project will produce a regional dynamic coastal flood inundation model providing future dynamic inundation maps for communities to help them adapt to sea level rise (SLR). To support municipal resiliency efforts, Maine has created a sea level rise viewer which incorporates most of the recent potential sea level rise scenarios from NOAA et al. (2017). However, this viewer is a bathtub model for "static" sea level rise and doesn't account for waves, wave run-up, or how mapped floodplains might change as a result of higher water levels. The proposed project would provide Maine coastal communities with future dynamic floodplain maps that include sea level rise. By building from regional modeling by USACE and incorporating a range of SLR and storm surge conditions, detailed coastal flood models of Portland and South Portland (located on Casco Bay) and Damariscotta (on the Damariscotta River) will be developed. The models will be utilized to produce future floodplain maps to be overlain with building and infrastructure footprints to facilitate climate-resilient planning. These model mapping efforts will be in accordance with IWRSS standards for mapping. Engineering analyses will be performed using FEMA-approved models and procedures, but this study does not intend to replace FEMA's Flood Insurance Rate Maps. The project will include community engagement, education, and outreach, and implementation of municipal mechanisms to incorporate model results (e.g., ordinance or zoning changes, etc.). A kickoff meeting was held on Dec. 7, 2020, with monthly meetings planned until the completion of the project.

MEDUXNEKEAG RIVER (2nd CD) – The Houlton Band of Maliseet Indians (Tribe) requested that the District assist them with aquatic ecosystem restoration or large-scale watershed management planning. The District prepared a reconnaissance (Section 905(b)) report describing opportunities to assist the Tribe. The report was approved by the U.S. Army Corps of Engineers' North Atlantic Division (NAD). The Tribe and the Army Corps executed a cost sharing agreement for a watershed management plan for the Meduxnekeag River Watershed on March 19, 2014. The District, together with the Tribe, Maliseet First Nation and Meduxnekeag River Association scientists, conducted fish habitat assessments in the fall of 2014 and 2015. The Meduxnekeag Watershed Assessment and Study Plan final draft was received from the contractor in December 2018. Reviews are ongoing and a final report will be released in 2021.

PASSAMAQUODDY TRIBE AT PLEASANT POINT (2nd CD) – The District has been conducting shoreline erosion investigations since 2016 through the Tribal Partnership Program (Section 203 of Water Resources Development Act of 2000) and Section 14 of the Continuing Authorities Program. Section 203 efforts have focused primarily on protection of Split Rock, an area of cultural significance to the Tribe. A report detailing alternatives to protect the site is expected to be released to the Tribe in 2019. Section 14 efforts have focused on protection of public housing further north. Feasibility study efforts are complete and final design efforts for the proposed rock revetment were initiated in the fall of 2018. Construction was initiated in late 2020 and will be completed by the summer of 2021.

Interagency and International Support

INTERNATIONAL JOINT COMMISSION AND INTERNATIONAL ST. CROIX RIVER WATERSHED BOARD – The International Joint Commission (IJC) is an independent bi-national organization established by the Boundary Waters Treaty in 1909 with the purpose to help prevent and resolve disputes relating to the use and quality of boundary waters and to advise Canada and the United States on related questions. The IJC carries out their mission in part through local boards established across the U.S./Canadian Boundary. The St. Croix River forms a boundary between New Brunswick, Canada and northeastern Maine. The District Commander is a co-chair of the Board, along with a Canadian co-chair. The Board's mandate is to proactively assist the Commission in preventing and resolving disputes regarding the boundary waters of the St. Croix River, to monitor the ecological health of the St. Croix River boundary waters aquatic ecosystem, and to ensure compliance with the Commission's Orders of Approval for structures in the St. Croix River. The Board prepares an annual report to the IJC on the St. Croix River. These annual reports and additional information on the IJC and the Board activities are available at the IJC sponsored website: https://www.ijc.org/en/scrwb.

SUPPORT TO THE U.S. DEPARTMENT OF VETERANS AFFAIRS – The District has teamed up with a sister federal agency to improve the care Soldiers are receiving at military hospitals. The U.S. Department of Veterans Affairs (VA) and the Army Corps of Engineers entered into an interagency agreement in 2001 for the goods and services USACE may provide to the VA when needed. These include project management, design services, construction management services, environmental services, preliminary technical investigations, surveying, and historical presentation compliance at VA facilities. In 2008, the VA started exercising the agreement and the District is now supporting the VA with services at several VA facilities in New England. Current or recent VA projects are located in Massachusetts, Rhode Island and Connecticut.

Conservation and Environmental Enhancement

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM (DERP), FORMERLY USED DEFENSE SITES (FUDS) – This Congressionally directed program (PL 98-212) provides for an expanded effort in environmental restoration. It emphasizes the identification, investigation and cleanup of hazardous and toxic waste; unexploded ordnance; and unsafe buildings, structures and debris at current and former military facilities. One hundred and eighty-one formerly used defense sites have been identified in Maine. Site and project eligibility investigations at 181 sites are now complete, including 93 where no work was found to be necessary. Of the 88 sites where work was needed, the following efforts are underway.

A revised inventory project report (INPR) was signed in May 2015 for the **Dow Military Airfield (2nd CD)** (located at the Bangor International Airport). Two projects (Fuel Filter/Drum/TCE Disposal Area and Salvage Yard) were identified as Hazardous, Toxic and Remedial Waste (HTRW) projects (without potentially responsible party (PRP) issues). A contract was awarded to Mabbett & Associates in September 2016 to conduct a Remedial Investigation (RI/FS) at the Dow Fuel Filter/Drum/TCE Disposal Area. A Phase 1 investigation under this contract was conducted in the fall of 2017. A Phase 2 is being planned for 2020.

An RI/FS of the Salvage Yard site began in 2018 with the field work completed in 2019. Groundwater sampling will continue in 2020 and the soil sample data will be evaluated to determine if more sampling is necessary.

USACE has determined that the remaining areas (e.g., Fire Training Area and Landfill) are PRP projects.

The NIKE LO-13 (Launch and Control sites), Caswell; Loring AFB Comm Annex #2, Perham; Loring AFB Laundry Annex, Presque Isle; The NIKE LO-13 (Launch and Control sites), Loring AFB Communications Annex, and Loring AFB Laundry Annex are each undergoing a Remedial Investigation by a District contractor, Credere Associates, LLC. Historical analytical data from these sites have been reviewed and data gaps identified by Credere Associates, LLC. To develop a Proposed Plan/Decision Document, additional soil and groundwater samples are required to fulfill the Risk Assessment (RA) requirements. Field activities that were completed in the fall of 2016 included soil borings and soil sampling at the NIKE LO-13 Launch site and the Loring AFB Laundry Annex. Residual petroleum contamination was detected at the Loring AFB Laundry Annex site during investigative field activities in the fall of 2016. Additional site investigations at both the LO-13 Control sites and the Laundry Annex were performed in July 2017. The Draft Laundry Annex RI is currently in review with the Maine Department of Environmental Protection (MEDEP). The Nike LO-13 Launch and Control sites Draft RI is currently in preparation for review by the MEDEP. The Loring AFB Communications Annex project was closed out in 2019.

The LO-58 Caribou, Remedial Investigation/Feasibility Report was finalized in February 2017 and a proposed plan was prepared in June 2018 followed by a public meeting on July 18, 2018. The proposed plan supports Long Term Monitoring for groundwater and indoor air along with operation of a Granulated Activated Carbon (GAC) at the Adult Multiple Alternative Center (AMAC) in order to remove trichloroethylene (TCE) and other volatiles. Additionally, a vapor mitigation system will be installed. The decision document has regulatory concurrence and was signed on Feb. 14, 2019. Verina Consulting is under contract to install the vapor mitigation system and conduct long term monitoring activities. Groundwater and drinking water samples were collected in June 2020. These five Maine sites are all in the 2nd Congressional District.

A Site Investigation (SI) at the Caswell Air Force Station was completed in 2019. The SI conclusions recommended a remedial Investigation for the project. A contract has been awarded for the RI. Field work is anticipated during the summer 2020.

For the Bucks Harbor Former Air Force Radar Tracking Station and Former Ground/Air Transmitter/Receiver (GATR) site (2nd CD) in Machiasport, the project includes investigation at three separate sites. These sites are the Howard Mountain, the Miller Mountain and the Transmitter sites. This separation of sites is based on the different geology, groundwater chemistry and TCE sources at each location. This effort will facilitate the selection and design of a long-term solution for the Air Force Radar Tracking Station in Bucks Harbor.

The District has developed a proposed plan for the site and completed a proposed plan public meeting on May 5, 2016. The recommended alternative will include long-term groundwater monitoring, monitored natural attenuation,

well head treatment (or connection to an alternate water supply) for impacted residents, and institutional controls. The recommended alternative will include the provision for providing an alternate water supply for the five affected residents in the Howard Mountain vicinity. The District will be responsible for maintaining the water line from the Downeast Correctional Facility (DCF) water supply.

Colby Engineering has completed a request for proposal (RFP) package with a partial design with concept plans with the general layout, dimensions, and orientation of the water line and system. In July 2017 the District awarded the design-build construction contract to install the water line. The basis of design specifications were completed in February 2018. The water line was anticipated to be installed in May 2018; however, the Downeast Correctional Facility (DCF) was unexpectedly closed in February 2018. Therefore, the design-build contract was suspended in February 2018, as the state of Maine determines the disposition of the DCF property. In 2019, the Department of Corrections (DOC) communicated their intent to re-open the DCF as a pre-release center. DOC construction activities will occur from 2020 to 2021. The District plans to use a new contract vehicle to integrate the water line extension design with DOC construction activities.

The on-going groundwater-monitoring program includes sampling and testing of water samples from residential drinking water wells and monitoring wells. Additionally, the District has performed vapor intrusion investigations at occupied DCF and Federal Aviation Administration (FAA) buildings and residential properties at the site. The results of these investigations concluded that there is currently no risk to the building occupants due to vapor intrusion of contaminants from the groundwater media to the indoor air. The decision document was finalized/signed in June 2017.

The District has completed a remedial investigation/feasibility study to evaluate trichloroethylene (TCE) contamination at the former **Air Force Ground/Air Transmitter Station in Glenburn (2nd CD).** TCE concentrations have been detected in the groundwater in the general area surrounding the site.

The proposed plan public meeting occurred in August 2014, with a public comment period extending from Aug. 4 to Sept. 8, 2014. The site decision document was signed by the District Headquarters in February 2016. The selected remedy includes monitored natural attenuation, long-term groundwater sampling, indoor air analysis, and land use controls. The Corps currently is working on implementation of the selected remedy components (including on-going vapor intrusion investigations, which were completed in March 2018; and installation of a bedrock monitoring well which was completed in November 2016). The Five-Year Review report began in 2020 with completion scheduled before February 2021.

A contract was awarded to Wood Environment and Infrastructure, Inc. in September 2019 to conduct a Remedial Investigation (RI) at the former **Charleston Air Force Station (2nd CD)**. The RI field investigation is anticipated to begin in the fall of 2020.

CONSTRUCTION – Work at the former **Naval Fuel Depot**, **Long Island (1st CD)** is complete. A site closure letter has been received from the Maine Department of Environmental Protection (MEDEP).

In the past number of years, dating back to the program's start in the mid-1980s, work has been completed at:

First District

Great Diamond Island, **Portland** Thompson's Point, **Thompson** Peak's Island, **Portland** Forts McClary and Foster, **Kittery** Jewell and Peaks Islands, **Portland** Fort Baldwin Military Reservation, **Phippsburg** Gerrish Island Fire Control Station, **Kittery** Merriam Point Fire Control Station, **Portland** Fort Preble, **South Portland** Former Fuel Depot, **Long Island (Portland) Cape Elizabeth** Fire Control Station Fort Levett on **Cushing Island** Fort Preble in **South Portland** Former Fuel Depot, **Long Island** Second District Dow Military Air Field, Bangor Charleston Air Force Station **Bangor** Ammunition Storage Annex Former **Presque Isle** Air Force Base Former Caswell Air Force Base Loring Air Force Base Outer Marker Annex, Fort Fairfield Laundry Annex, Presque Isle Communications Annex. Perham Nike Site LO-31, Limestone Nike Site LO-58, Caribou Nike Site LO-85. Connor Nike Site LO-13, Caswell Presque Isle Air Force Base. Presque Isle Air Force Radar Tracking Station, Bucks Harbor Air Force Ground/Air Transmitter Station, Glenburn

Support to the U.S. Environmental Protection Agency (EPA)

SUPERFUND ASSISTANCE – The District provides support to the U.S. Environmental Protection Agency (EPA) Region I's (New England) Superfund program. This includes responsibility for site investigations, design work, construction execution, and some operation and maintenance at federal lead sites when our support is requested. In addition, the District provides other technical assistance (5-year reviews, real estate support, etc.) at removal and national priority list sites being addressed by EPA Region I. During the past few years, we have provided support to EPA on projects in Acton (1st CD), Lewiston (2nd CD), Saco (1st CD), Meddybemps (2nd CD), South Hope (1st CD) and Corinna (2nd CD).

CALLAHAN MINE SUPERFUND SITE, BROOKSVILLE - The Callahan Mine Superfund site is located at a former open pit mine located in Brooksville. In the 1960s, the 75-acre Goose Pond Estuary was dammed and drained to facilitate open pit mining for zinc, copper, lead, arsenic and cadmium. From 1967-1972, the 300-footdeep open pit was mined resulting in the stockpiling of 2.5 million cubic yards of waste rock material, and the creation of a 21-acre tailing impoundment. The Goose Pond Dams were re-opened in 1972, and the mine pit is currently under water. The District continues to provide technical support to EPA to evaluate remedial alternatives to address the tailing impoundment, waste rock piles, and contaminated groundwater and sediment. A \$45 million Indefinite Delivery/Indefinite Quantity (ID/IQ) contract was awarded to Environmental Quality Management, Cincinnati, Ohio (EQM) on May 18, 2018 to address all of these, with the first task order under the ID/IQ focused on stabilization of the tailing pile. Field investigations were performed in late 2018 to assist in work plan development. Work completed in 2019 included technical meeting with stakeholders to refine the tailing pile stabilization approach, installation and monitoring of geotechnical instrumentation for safety and field execution support, and development of final workplans for the 2020 construction season. Work in 2020 included utilization of 21,000 cubic yards of on-site rock to construct a buttress and access road around the toe of the tailing pile. removal of 53,000 CY of rock from the face of the tailing pile, and removal of 46,000 CY of tailing and placement at the back/west end of the pile to increase stability of the pile. Activities also included environmental sampling, pump tests to understand ground water flow, stabilizing the site for the winter, and decommissioning of wells no longer needed. Rock processing for use as cover material will begin in early 2021 with final grading/cover system install beginning in the Spring 2021. The project team continues to work closely with all stakeholders to minimize local impacts.

Regulatory Activities

STATUS OF PROGRAM – Department of the Army permits are required from the Army Corps of Engineers under Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection, Research and Sanctuaries Act. The District reviews permit applications for work affecting

navigable waters under its Section 10 authority and the discharge of fill material into all waters, including inland wetlands, under Section 404. A list of Monthly General and Individual Permit Authorizations is available on the District website at: <u>https://www.nae.usace.army.mil/Missions/Regulatory/permits-Issued/</u>. Relevant environmental documents are available upon written request.

For information about Army Corps of Engineers jurisdiction of wetlands and whether a permit is required for your work, contact the Regulatory Division at 978-318-8338 or 978-318-8335. Inquiries can be sent by email to <u>cenae-r@usace.army.mil.</u> More information about Regulatory Division topics is available on our District website at: <u>https://www.nae.usace.army.mil/Missions/Regulatory/</u>. The Maine Project Office can be reached at 207-623-8367.

GENERAL PERMITS – The District has comprehensive Regional General Permits (RGPs) in place for each of the six New England states that authorize work with no more than minimal adverse effect on the aquatic environment. Up to 98% of all permits issued in New England are RGPs. Work eligible under the RGPs is generally approved in less than 60 days. A statewide general permit has been in place in Maine since 1983 and was the first of its kind in New England. On Oct. 13, 2020, the District replaced and revised the former statewide Maine General Permit (GP), pursuant to 33 CFR 325.S(c)(I). The singular GP was replaced with 23 activity-based GPs. The revised Maine GPs document organizes eligible work into activity-specific categories. Project eligibility under these GPs falls into two categories: self-verification (SV) and preconstruction notification (PCN). The District will continue to review PCN activities along with state and federal resource agencies (U.S. Fish and Wildlife Service, U.S. Environmental Protection Agency, and National Marine Fisheries Service) as applicable. Through project review, the District determines if the individual and cumulative adverse environmental impacts for PCN projects are minimal and whether the project may proceed under the appropriate GP.

Projects that do not meet the terms and conditions of the GPs will require an individual permit. The replacement of the former GP does not alter the individual permit review procedures. The reissuance also does not alter the federal exemptions (33 CFR Part 323.4), which are not necessarily the same as the state of Maine's exemptions. In addition, GP authorizations are not be valid until all other required federal and state permits and/or certifications, as listed in the GPs, are obtained.

The current Maine RGP is available on our website at:

<u>https://www.nae.usace.army.mil/Missions/Regulatory/State-General-Permits/Maine-General-Permit/</u>. Additional information is available from Permit Project Managers Jana Jacobson and Colin Greenan at 207-623-8367 or by email to jana.l.jacobson@usace.army.mil and <u>colin.m.greenan@usace.army.mil</u>

AQUACULTURE (1st & 2nd CDs) – Aquaculture has been present within the coastal waters of Maine since the 1800s. The first official aquaculture lease was issued by the Maine Department of Marine Resources in 1973. That farm was established for the purpose of cultivating salmonids and blue mussels. Although finfish culture was unsuccessful, warm water temperatures and high productivity made the Damariscotta River an ideal site for growing shellfish. In the 1980s, mussel and oyster aquaculture underwent a period of tremendous growth and expansion and continues to this day statewide.

Mussel farming now spans the coast from Casco Bay east to the Jonesport area. Although cultured in estuarine waters along the coast, the Damariscotta River continues to be the premier location for oyster farming in Maine. Clams, scallops and urchins also are cultivated, on a smaller scale, in various locations in the state. New to the aquaculture industry in Maine, seaweed culture has established itself in several locations in Casco Bay and Maine seaweed is being actively marketed in restaurants, schools, and healthcare facilities for its numerous reported health benefits.

The development of finfish aquaculture lagged behind shellfish by 10 years or more. In the early 1970s, coho salmon and rainbow trout were being raised in floating pens within the Wiscasset River and on Vinalhaven Island. In 1984, Ocean Products, Inc. established farms in the cold waters of Cobscook Bay at Eastport. Since then, Atlantic salmon farming has spread west to the Blue Hill Bay region. Salmon aquaculture in Maine is second only to Maine's lobster industry in terms of economic return. The industry has undergone major restructuring for a variety of reasons. There is currently only one company controlling four hatcheries and 29 finfish leases totaling 580.33 acres. Only nine of these farm sites were active in 2010, reporting an overall harvest of nearly 25 million pounds at an estimated value in excess of \$73 million. This is down from 28 sites reporting a harvest of over 36 million pounds in 2000. Indirect spending (supply chain) and the high number of jobs created within the industry

and its suppliers contribute greatly to the tax revenues of the state. The bulk of this economic activity occurs in an economically depressed region of the state.

The District has been actively involved with this dynamic industry since at least the mid-1980s. Working with state and federal partners and the industry, we developed a joint application and siting guidelines and continue to work cooperatively with those partners on issues such as endangered species consultation, regulatory streamlining, containment, finfish marking and genetics, seabird interaction, bay management, minimizing navigational impacts, and improving public awareness. The majority of permit applications for aquaculture projects in Maine become eligible for the Maine GP, thereby reducing regulatory burdens on the industry.

LAND BASED AQUACULTURE (2nd CD) - Two large land-based salmon aquaculture facilities are proposed in Maine. Located at a former paper mill site in Bucksport and at an undeveloped parcel of land in Belfast, each of these independent developers would construct rearing and holding tanks with associated infrastructure in indoor facilities, thereby eliminating the need for ocean-based pen systems. At Bucksport, no additional federal permitting is required. State and federal permit applications for the Belfast proposal are in process.

The Belfast proposal, known as Nordic Aquafarms Inc., includes a land-based facility sited on 54 acres, consisting of multiple buildings to house administrative & operational functions, production modules, processing wastewater treatment, facility infrastructure (water, power, sewer), access drives and parking. Facilities of this nature allow fish production indoors in high densities using recycled water vs. traditional outdoor open ponds with one-time water flow through. This results in an estimated 80% in water savings. The waterward portion of the facility will require the installation of two water intake and one water discharge pipe co-located within a common trench extending through the intertidal zone and anchored with concrete collars in the subtidal zone of Belfast Bay. Both temporary and permanent discharges of fill into waters of the U.S. as well as work in navigable waters is necessary to facilitate project construction. Compensatory mitigation in the form of an In-Lieu Fee payment to Maine's Natural Resources Conservation Program (MNRCP) and replacement of two improperly sized and installed downstream culverts is currently proposed by the applicant.

A public notice for this work was issued on February 4, 2020 and expired March 4, 2020. Public comment continues to be evaluated and Endangered Species Act consultation with the U.S. Fish & Wildlife Service and National Marine Fisheries Service is ongoing. State permits, Water Quality Certification, and Coastal Zone Consistency were issued on Nov. 19, 2020.

HARBOR MANAGEMENT (1st & 2nd CDs) – The Maine Project Office and District staff continue to work closely with the state's harbormasters in the area of harbor management. The District is an annual presenter at the Maine Harbormasters' Association annual training at Castine. The Maine Project Office is working actively with a number of communities which sponsor federal navigation projects, thereby facilitating continued federal maintenance. The Maine Project Office routinely provides advice on harbor ordinances, mooring issues, and user conflicts and assists the U.S. Coast Guard in related outreach efforts. The 2021 training is tentatively scheduled for March 3-5 at the Maine Maritime Academy in Castine.

CENTRAL MAINE POWER COMPANY; NEW ENGLAND CLEAN ENERGY CONNECT (NECEC) (1st & 2nd CD) -- Central Maine Power Company proposes to place temporary and permanent fill in numerous waterways and wetlands between Beattie Township at the Maine/Quebec border and Lewiston, Maine in order to construct a new High Voltage Direct Current (HVDC) electrical transmission line and related facilities capable of delivering up to 1,200 megawatts of electrical power from hydroelectric sources in Quebec to the New England Control Area, specifically in response to a Request for Proposals for Long-Term Contracts for Clean Energy Projects from the Commonwealth of Massachusetts. This work includes the following components:

- A 145.3 mile, +/-320 kilovolt (kV) HVDC transmission line from the Canadian Border to a new DC to AC converter station located in Lewiston, including a crossing beneath the upper Kennebec River via horizontal directional drilling;
- A DC to AC converter station and associated +/- 1.2-mile 345 kV transmission line in Lewiston;
- A new substation and associated +/- 0.3-mile 345 kV transmission line in Pownal;
- A 26.5-mile 345 kV transmission line between Windsor and Wiscasset;
- Two 115 kV transmission line rebuilds between Lewiston and Pownal; and

• Additional equipment installation and upgrades at Larrabee Road Substation (Lewiston), Crowley's Substation (Lewiston), Surowiec Substation (Pownal), Coopers Mills Substation (Windsor), Raven Farm Substation (Cumberland), and Maine Yankee Substation (Wiscasset).

The project area encompasses six Maine counties and 38 municipalities or townships. Approximately 53.5 miles of the new line, from the Canadian border to the Forks, will be located within a previously undeveloped, 300-foot wide transmission line corridor, only 150 feet of which will be cleared. The remainder of the 145.3 miles of transmission line from the Forks to Lewiston (63%), will be installed within existing transmission corridors. The new line will be installed beneath the upper Kennebec River via horizontal directional drilling. All other waterway and/or wetland crossings will be aerial.

The public notice for the project expired April 25, 2019. Numerous comments were received from project opponents and supporters. A revised application was submitted on July 1, 2019. The Corps held a public hearing on Dec. 5, 2019 in Lewiston, Maine. Over 200 attendees submitted oral and/or written testimony opposing or supporting the proposal.

A validated permit was issued by the Corps on Nov. 6, 2020. The project requires a separate Presidential Permit from the U.S. Department of Energy (DOE). DOE's review continues.

MAINE ATLANTIC SALMON IN-LIEU FEE PROGRAM (1st & 2nd CDs) - The Regulatory Division worked with the U.S. Fish and Wildlife Service (USFWS), Maine Department of Marine Resources (MEDMR), and the Maine Department of Transportation (MaineDOT) to develop an agreement for use of an in-lieu fee (ILF) program to provide an alternative to permittee-responsible mitigation when the Corps requires mitigation for stream impacts and/or projects involve coordination with the USFWS for impacts to the endangered Atlantic salmon. The ILF program provides applicants an efficient and workable alternative to permittee-responsible mitigation of paying a fee, if the USFWS and/or District, in consultation with the other federal resource agencies, agree it is the best alternative, taking into account the Mitigation Rule issued by the Corps and EPA in April 2008. The fees collected through the ILF program will be aggregated by Salmon Habitat Recovery Unit which cover a large portion of the state of Maine. The funds must be used within a specified time period to restore, create, and enhance aquatic resources and/or preserve aquatic resources and their associated uplands to benefit the Atlantic salmon. A public notice soliciting comments on the prospectus for this program was issued on March 28, 2017. After addressing comments, the sponsor, MEDMR, was authorized by the District to draft the program instrument and on May 16. 2018 to develop the final instrument. The instrument was fully signed by the Corps, USFWS, and MEDMR on Sept. 20, 2018 and is now available for use by permit applicants. Only two proposals for its use have been received to date.

MAINE DOT UMBRELLA MITIGATION BANK (1st & 2nd CDs) – The Maine Department of Transportation (MaineDOT) has established an Umbrella Mitigation Bank with a site on Sears Island as the first proposed deposit into the bank. The Maine Umbrella Mitigation Banking Agreement (MUMBI) was signed by both MaineDOT and the District on Aug. 24, 2011. On Aug. 1, 2013, MaineDOT submitted a prospectus for a second site proposed for addition to the bank: Sherman Marsh in Newcastle. MaineDOT was unable to address the Interagency Review Team's concerns about an adequate buffer to the aquatic resources. MaineDOT withdrew the proposal in December 2017.

MAINE VERNAL POOL SPECIAL AREA MANAGEMENT PLAN (1st & 2nd CDs) – The University of Maine developed a proposed Maine Vernal Pool Special Area Management Plan (VP SAMP) in partnership with the Districts' Regulatory Division; the Maine Departments of Inland Fisheries and Wildlife, Environmental Protection, and Agriculture, Conservation and Forestry; the U.S. Fish and Wildlife Service; the U.S. Environmental Protection Agency; the Maine towns of Orono and Topsham; and representatives of the real estate, development, and land trust communities. The VP SAMP is an alternate mitigation mechanism to address anticipated permitting and compensatory mitigation needs to improve the long-term management of vernal pools. The Maine VP SAMP improves the agencies' capacity to protect the natural resource functions and values of vernal pools at a landscape scale while supporting municipal goals for growth. The Maine VP SAMP supports municipal growth by allowing vernal pool impacts in municipally designated growth areas (DGAs) in exchange for conservation activities in municipally identified Rural Areas. The Maine VP SAMP promotes the meaningful conservation of vernal pools and surrounding habitat by applying landscape level conservation principles and assessment criteria to identify high value conservation targets in Rural Areas. Public comment on the Maine VP SAMP was solicited via a March

8, 2016 public notice and through a May 12, 2016, public informational meeting. The VP SAMP protocol was signed by the District Engineer and Maine DEP on Aug. 26, 2016, and Sept. 6, 2016, respectively.

Municipalities interested in using the VP SAMP must meet specified requirements and then must sign the VP SAMP along with the Corps and Maine DEP. The towns of Topsham and Orono are the first communities working to implement this novel approach, but the plan is intended to be available to towns statewide. The town of Topsham was delegated the authority to regulate vernal pools in their designated development area by the Maine Board of Environmental Protection (MBEP) on May 17, 2018. The VP SAMP was fully signed by the town, Maine DEP, and the Corps on June 6, 2018 and is now available for use. The town of Orono was delegated the authority to regulate vernal pools in their designated development area by the MBEP on April 3, 2019, provided they make two amendments to their town ordinances. The VP SAMP was fully signed by the town, Maine DEP, and the District on April 19, 2019.

MAINE WETLAND IN-LIEU FEE PROGRAM (1st & 2nd CDs) - Regulatory Division worked with the Maine Department of Environmental Protection (MEDEP) and the Maine Office of The Nature Conservancy (TNC) to develop an agreement for use of a program to provide an alternative to permittee-responsible mitigation when the Corps requires mitigation. The in-lieu fee (ILF) agreement utilizes Maine's "Natural Resource Mitigation Fund" to provide this. Site-specific mitigation for many permitted projects has had limited ecological value due to their size. location, and/or permittee's ability to provide appropriate stewardship. The ILF program provides applicants an efficient and workable alternative of paying a fee, if the District, in consultation with the federal resource agencies, agrees it is the best alternative, taking into account the Mitigation Rule issued by the Corps and EPA in April 2008. This rule provides a 'soft' preference for mitigation banking and ILF programs over permittee-responsible mitigation. The fees collected through the ILF program are aggregated by bioregion within the state of Maine and must be used within a specified time period to restore, create, and enhance aquatic resources and/or preserve aquatic resources and their associated uplands. The original Maine ILF agreement was signed on Jan. 31, 2008. MEDEP, with the assistance of their program administrator, TNC, developed a revised ILF instrument that complies with the Mitigation Rule. After being signed by MEDEP and the District, the ILF became effective on Sept. 21, 2011. The program has now gone through 11 granting cycles. In November 2019, \$3,544,780 was granted to 19 projects located in five service areas: Aroostook Hills and Lowlands, Central and Western Mountains, Central Interior and Midcoast, Downeast Maine, and Southern Maine. Since the start of the program in 2008, approximately \$24 million has been collected in fees and approximately \$14 million has been granted for compensatory mitigation projects. Transportation (37%), Residential/Commercial Development (27%), Education/ Health Facilities (11%) and Energy (18%) sectors have contributed the bulk of the funds to the program. The 2020 review cycle begins this summer with the issuance of a request for proposals (RFP). The 2020 request for letters of intent was distributed on June 1, 2020. The ILF program will be accepting these Letters of Intent until the end of June. After the initial screening, an invitation for a full proposal will be sent to the project sponsors that demonstrate that their project has merit to provide compensatory mitigation. Details on the program, all the approved projects, and permits using the program, are available online at: https://ribits.usace.army.mil. Additional information is available online at: www.mwrcp.org and www.nature.org/ourinitiatives/regions/northamerica/unitedstates/maine/explore/mnrcp.xml.

PUBLIC OUTREACH (1st & 2nd CDs) – In addition to ongoing coordination with Maine's harbormasters, the Maine Project Office (MPO) staff participates in numerous public outreach sessions. These include but are not limited to university career days, Nation-to-Nation Tribal Outreach, regional/state dredging committee meetings, numerous public meetings and hearings, and local/regional transportation planning committee meetings. A number of these are in support of other divisions or branches within the District. MPO staff has participated in the following outreach: Maine Audubon Society's Stream Smart Road Crossing Workshops; Maine Code Enforcement Officers' Vernal Pool Workshop; the Maine Harbormaster Association Training; Maine Department of Marine Resources aquaculture stakeholder outreach; the Maine Association of Wetland Scientists Annual Meeting; and the Maine Association of Professional Soil Scientists Annual Field Workshop. Similar workshops with these groups are scheduled for 2021 depending on COVID-19 postures.

STREAM CONNECTIVITY RESTORATION ACTIVITIES (1st & 2nd CDs) – Over the last 200 years, Maine's history of dams, log drives, stream channelization, sedimentation and poorly constructed road-stream crossings have altered and eliminated access to important Atlantic salmon habitat (NMFS 2005). Since 2009, Atlantic salmon and its critical habitat in Maine have been listed under the federal Endangered Species Act (ESA). On Sept. 26, 2017, the Districts' Maine Project Office in partnership with FEMA, the U.S. Fish & Wildlife Service (USFWS), and the U.S. Forest Service developed an Atlantic salmon habitat conservation plan focusing on Stream Simulation

design road-stream crossings to restore stream connectivity within the state of Maine. The Corps and FEMA are required to consult with the Service on any federal action that may affect listed species or critical habitat pursuant to Section 7 of the ESA. Traditionally, this consultation can delay Corps permitting and FEMA actions. Lengthy interagency coordination has now resulted in a programmatic approach to Section 7 consultation, specific to stream connectivity restoration projects, thereby substantially reducing the consultation timeline and subsequent permitting and FEMA funding processes. This programmatic approach provides the Corps and FEMA with a consistent methodology and appropriate criteria for implementing, documenting, evaluating, and monitoring stream connectivity restoration activities in a manner that is consistent with the long-term conservation needs of the species. In addition, this approach facilitates ESA section 7 consultation with USFWS, providing information of sufficient detail and quality to support the appropriate USFWS analysis and help streamline efforts that lead toward the attainment of Atlantic salmon habitat/stream connectivity goals. Although this effort focuses on Atlantic salmon, improvements to habitat connectivity will greatly benefit other aquatic organisms, too. To date, seven projects have been authorized through this streamlined process with eight more pending. For more information, visit: http://atlanticsalmonrestoration.org/news-announcements/atlantic-salmon-recovery-newsreleases/streams-crossing.