



**US Army Corps
of Engineers**
New England District

Update Report for Connecticut



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Mission

The missions of the New England District, U.S. Army Corps of Engineers include flood risk management protection, emergency preparedness and response to natural disasters and national emergencies, environmental remediation and restoration, natural resource management, streambank and shoreline protection, navigation maintenance and improvement, support to military facilities and installations, and engineering and construction support to other government agencies. The six New England states cover 66,000 square miles, with 6,100 miles of coastline, 171 federal navigation projects (13 deep draft commercial waterways), 13 major river basins, and thousands of miles of navigable rivers and streams. The District operates and maintains 31 dams, three hurricane barriers and the Cape Cod Canal. Through its Regulatory program, it processes nearly 2,500 applications per year for work in waters and wetlands of the six-state region. We employ about 510 professional civilian employees, with about 300 stationed at our headquarters in Concord, Mass. Other Corps of Engineers employees serve at Corps projects and offices throughout the region. For information on the New England District check the website at: www.nae.usace.army.mil/; on Facebook: [facebook.com/CorpsNewEngland](https://www.facebook.com/CorpsNewEngland); on Twitter: twitter.com/corpsnewengland; or on Flickr: www.flickr.com/photos/corpsnewengland.

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Navigation

BRIDGEPORT HARBOR DREDGE MATERIAL MANAGEMENT PLAN (4th CD) – The city of Bridgeport has requested maintenance dredging of Bridgeport Harbor. In response to this request, the New England District performed a Preliminary Assessment for Bridgeport Harbor, which concluded that continued maintenance of Bridgeport Harbor is likely justified, but that a detailed Dredge Material Management Plan (DMMP) for Bridgeport Harbor should be developed. A Draft DMMP and Draft Environmental Assessment have been prepared and are available on the Corps website. A public notice announcing the availability of the Environmental Assessment and DMMP was released on Feb. 24, 2010. Three public meetings were held to brief the local communities on the project. Meetings were held in April and October 2010 in New Haven and in September 2010. Based on comments from the meetings some additional studies were conducted. Both a Water Quality Certificate and Coastal Zone Management Consistency Determinations were sent to the Connecticut Department of Energy and Environmental Protection. The Draft DMMP and EA will be updated prior to submittal to NAD for approval.

BRIDGEPORT HARBOR BREAKWATER REPAIR (4th CD) – A construction contract to repair approximately 4,500 lineal feet of breakwater in Bridgeport Harbor was awarded in May 2014. The work was completed in March 2015. The work was conducted to restore and repair damage caused by Hurricane Sandy in late October 2012. Construction costs for the Bridgeport repairs are about \$2.5 million. Funding for

this effort was included in the “Disaster Relief Appropriations Act of 2013.” The \$50.5 billion Sandy aid bill was signed into law on Jan. 29, 2013 (PL 113-2). The work was part of a \$7.4 million contract to repair the Bridgeport breakwaters and New Haven breakwaters.

HOUSATONIC RIVER, STRATFORD AND MILFORD (3rd CD) – The state of Connecticut is the sponsor for the maintenance dredging of about 250,000 cubic yards of sand from the 18-foot channel of the lower portion of the Housatonic River, and the placement of the sand directly onto Hammonasset Beach State Park in Madison, in order to renourish the beach which has been eroding. Dredging may be done by mechanical means or by hopper dredge. Environmental approvals are being obtained and contract plans and specifications are being finalized so that a contract can be advertised for bids. The work window is Oct. 1, 2016 to Jan. 31, 2017, with some work extending to Feb. 28, 2017.

LONG ISLAND SOUND DREDGED MATERIAL MANAGEMENT PLAN (2nd, 3rd & 4th CDs) – In February 2005 in a joint letter, the Governors of Connecticut and New York requested that the Corps of Engineers participate in the development of a Dredged Material Management Plan (DMMP) for the Long Island Sound (LIS) Region. The Project Delivery Team for this project is comprised of representatives of the New England and New York USACE Districts, Regions I and II of the USEPA, representatives of Connecticut DEEP and Connecticut Department of Transportation,

representatives of New York Department of State and New York Department of Environmental Conservation, and the Rhode Island Coastal Resource Management Council. A series of public scoping meetings were held the week of Nov. 26, 2007.

On Aug. 17, 2015, a draft DMMP and draft Programmatic Environmental Impact Statement (PEIS) were released for public review, the culmination of a significant study effort initiated by the letter from the governors. To date, six public hearings have been held, Aug. 24 – 27 and Sept. 16-17, 2015 in Connecticut and New York, to provide an overview of the reports and to receive public comments.

The DMMP examines the need for dredging, the history of dredging and dredged material placement, and current beneficial use practices. The DMMP identifies and assesses Federal Base Plan alternatives for future dredged material placement and beneficial use for future Federal dredging activities. However, further site-specific studies must be performed for individual dredging projects or proposed project improvements.

The DMMP identifies potential, practicable, cost-effective, and environmentally acceptable placement alternatives to meet the dredging needs of Long Island Sound's ports and harbors. Without practicable placement alternatives dredging costs will increase, fewer projects will be maintained, economic viability of projects will be reduced, and navigation dependent sectors of the regional economy will be impaired. The DMMP highlights opportunities to beneficially use dredged material for purposes of coastal resiliency and environmental restoration.

The DMMP recommends interagency involvement continue with regards to dredged material management, dredging data management, continued study of the impacts to open water placement, and support for opportunities for beneficial use. The DMMP and PEIS are available for review on the Corps website at: www.nae.usace.army.mil/Missions/ProjectsTopics/LongIslandSoundDMMP.aspx.

The Final DMMP and PEIS were released on Jan. 11, 2016.

MIANUS RIVER, GREENWICH (4th CD) – The town of Greenwich has requested maintenance dredging of the 6-foot Federal channel. Environmental approvals are being obtained and contract plans and specifications are being finalized so that a contract can be advertised for bids to mechanically dredge about 50,000 cubic yards of sediment from the river, and place the sediment about eight miles away at the Western Long Island Sound Disposal Site. The dredge window, due to environmental conditions, is Oct. 1, 2016 to Jan. 31, 2017. The state of Connecticut is the sponsor for this project.

MILFORD HARBOR (3rd CD) – The city of Milford has requested dredging of the entrance to Milford Harbor. The government-owned special-purpose (hopper) dredge, CURRITUCK, will remove about 15,000 cubic yards of sediment from shoaled portions of the 10-foot entrance channel and place the material about a mile to the east at a nearshore site off Bayview Beach. The CURRITUCK *completed* the dredging *from June 14 - 29*.

NEW HAVEN HARBOR, NEW HAVEN AND WEST HAVEN (3rd CD) – The existing Federal navigation project at New Haven Harbor consists of a 35-foot deep channel approximately 4.5 miles in length that extends from Long Island Sound to the major wharves in the inner harbor. The Federal navigation project also includes a turning basin, anchorage areas and other smaller navigation features not proposed to be maintained at this point. A project to deepen the port to 40 feet was authorized in WRDA 1986 but was never funded for construction and eventually deauthorized. Resolutions of the U.S. Senate and House call for a study to examine deepening this port's main channels to greater than the 35 feet now authorized. A new feasibility study is required to re-examine the proposed deepening. The USACE and the New Haven Port Authority signed a feasibility study cost sharing agreement in December 2015 and development of the study project management plan (PMP) is on-going in 2016. The PMP provides the scope and schedule for the feasibility study.

TREATMENT OF DREDGED MATERIAL FROM LONG ISLAND SOUND DEMONSTRATION, BRIDGEPORT (2nd, 3rd, & 4th CDs) – The Corps has been working with the Bridgeport Port Authority, CT DEEP and CT DOT on an Innovative Technologies for Dredged Material Demonstration Project under the provisions of Section 345 of the Water Resources Development Act of 2000 (WRDA 2000). This authority requires that material treated under this authority be considered for beneficial reuse. Dredged material that was treated using a soil washing technology is being used in a blending operation that hopefully will result in a material that can be used in an unrestricted manner to meet landscaping needs. The demonstration effort was initiated with sampling performed on treated material. Sampling results were provided to project sponsors and the processors cooperating in the project. Treated material was provided to processors for additional treatment and blending. Post processing testing was completed and samples analyzed. Results of additional treatment were disappointing since blended material did not meet unrestricted use. After additional blending was conducted the material was again analyzed. Blended material has been moved to Silver Sands State Park and seeded to determine the viability to grow vegetation. A report documenting the demonstration project and results is being prepared.

Shoreline/Streambank Protection

MIDDLETOWN, CT (2nd CD) – A Section 14 streambank protection project along the Connecticut River has been requested by the city of Middletown. The stabilization is

needed to prevent riverine erosion from threatening a city-owned water supply well field. Design efforts are complete.

A \$1,282,550 contract was awarded on June 19, 2014. Work consists of stabilizing approximately 1,300 feet of riverbank along the right bank of the Connecticut River adjacent to the John S. Roth Municipal Well Field. Construction was

conducted during the seasonal low flow period in the wet. An operational and maintenance manual will be completed in 2016. The completed project will be turned over to the city of Middletown.

Beach Erosion and Hurricane and Storm Damage Reduction

BROADWAY AND BAYVIEW BEACHES, MILFORD (3rd CD) – An initial appraisal of storm damage reduction along these two shoreline areas in Milford has been initiated. Funding for the analyses was provided through the Disaster Relief Appropriations Act of 2013. The initial appraisal for Bayview Beach was completed in 2014 and approved by North Atlantic Division (NAD) in January 2015. We are awaiting a determination from NAD on Broadway Beach.

COSEY BEACH, EAST HAVEN (3rd CD) – An initial appraisal of storm damage reduction along the Cosey Beach area has been initiated. Funding for the analysis was provided through the Disaster Relief Appropriations Act of 2013. The initial appraisal for Cosey Beach was completed in 2014 and approved by North Atlantic Division in January 2015.

ENDERS ISLAND, MYSTIC (2nd CD) – St. Edmund's Retreat, Inc., a non-profit organization operating on Enders Island, requested the Corps of Engineers assistance in protecting property and resources on the island from storm

damage and erosion in 2008. Enders Island is a 12-acre island located in Fishers Island Sound. The island is connected to Mystic, Conn., via a causeway and is protected by a seawall constructed in the early 1900s. The seawall is in poor condition and no longer provides protection against waves and erosion during large storms. The Corps received funds in 2010 to initiate a feasibility study to determine the Federal interest in assisting the Retreat with protection alternative analysis and construction. The seawall was further damaged during Hurricane Sandy. We are assessing the damage and adjusting the preliminary alternative plans. We expect to execute a cost-sharing agreement.

FAIRFIELD BEACH, FAIRFIELD (4th CD) – An initial appraisal of storm damage reduction along the Fairfield Beach area has been initiated. Funding for the analysis was provided through the Disaster Relief Appropriations Act of 2013. The initial appraisal for Fairfield Beach was completed in 2014 and approved by North Atlantic Division in January 2015. We are currently working on signing a Feasibility Cost Sharing Agreement (FCSA).

Ecological Restoration/Watershed Projects

CONNECTICUT RIVER ECOSYSTEM RESTORATION STUDY(1st&2nd CDs)–Authority to conduct an ecosystem restoration study in the upper Connecticut River watershed is provided through a resolution adopted by the Committee on Environment and Public Works of the U.S. Senate on May 23, 2001. A reconnaissance report identified several ecosystem restoration opportunities along the main stem of the Connecticut River. Since then the Water Resources Development Act of 2007 authorized the Corps to partner with The Nature Conservancy (TNC). A feasibility study was initiated with TNC in 2008. The study is investigating alternatives to manage flow for the 70 largest dams in the basin with the goal of improving aquatic habitat while maintaining human uses such as flood control, hydropower, water supply and recreation. Various tools (e.g. operation and optimization computer models) have been developed to assess these management measures. The study is expected to be completed by the end of 2016.

MILL RIVER RESTORATION, STAMFORD (4th CD) – The

city of Stamford and the Corps partnered to restore aquatic resources on the lower two miles of the Mill River (Rippowam River) under the Corps Aquatic Ecosystem Restoration Program (Section 206 of the Water Resources Development Act of 1996). Degradation of this urban river resulted from two dams, channel modifications, and excess sedimentation related to urban stormwater runoff.

Construction was completed in October 2011. The project removed Main Street Dam and more than 1,000 feet of concrete retaining walls, restored ¼-mile of the river channel and floodplain impacted by the dam, restored the riparian corridor along portions of the lower two miles of river, removed a concrete impoundment structure under Pulaski Street Bridge to restore the river channel, and restored approximately one acre of tidal salt marsh habitat. In addition to restoring river and salt marsh habitats, this project opened the lower Rippowam River to anadromous fish passage. The Corps will monitor the project through 2016 to ensure restoration success.

Special Studies

LONG ISLAND SOUND NATIONAL ESTUARY PROGRAM
– The District is actively participating in the Long Island

Sound National Estuary Program by attending meetings and providing water resource planning support and expertise.

A paper titled "Remediation Techniques for Contaminated Sediment in Long Island Sound" has been provided to the

Long Island Sound National Estuary Program for its use in decision-making.

Interagency and International Support

SUPPORT TO THE U.S. DEPARTMENT OF VETERANS AFFAIRS – The New England District has teamed up with a sister federal agency in an effort to improve the care Soldiers are receiving at military hospitals. The U.S. Department of Veterans Affairs (VA) and the Corps of Engineers entered into an interagency agreement in 2001 for the goods and services the Corps 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 its agreement with the Corps in New England and NAE is now supporting the VA with services at several VA facilities in New England. In Connecticut, NAE has VA rehabilitation projects underway in West Haven. The Inpatient Unit on the 6th floor of the West Haven Medical Center has been completed. In addition, the Phase I of the Mental Health Corrections on the 8th floor was completed in late September 2013. The modified Phase II of the 8th floor was completed in October 2015.

Conservation and Environment

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM (DERP) – This congressionally directed program (PL 98-212) provides for 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. Fifty-five formerly used defense sites (FUDS) have been identified in Connecticut. Site and project eligibility investigations at 54 sites are now complete, including 37 where no work was found to be necessary. The remaining site, the **University of Connecticut Bachelor Housing Site (2nd CD)**, will be studied in the future when priorities and funding allow. There currently are no active FUDS projects in Connecticut.

Rentschler and Brainard fields, Hartford (1st CD), by the Army Engineering and Support Center in Huntsville, Ala. No evidence has been found that ordnance still exists, and additional investigation is not warranted at this time.

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

First District

Cromwell Nike Site, Tank Removal
East Windsor Nike Site, Tank and Transformer Removal
Manchester Nike Missile Site
Bradley International Airport, Tank Removal

Second District

Groton Pine Island, Pit Closure

Third District

New Haven Army Airfield, Transformer Removal
Ansonia Nike Site, Tank/Transformer Removal, Silo Closure

Fourth District

Fairfield Nike Site, Tank Removal and Silo Closure
Westport Nike Site, Tank Removal and Silo Closure

Fifth District

Waterbury Naval Reserve Rehab Center, Tank Removal
Farmington Nike Site, Tank Removal and Silo Closure

Environmental restoration projects at **Fort Griswold** and **Pine Island Battery, Groton (2nd CD)**; **Pratt & Whitney, Southington (1st CD)**; and **Fort Hale, New Haven (3rd CD)** will be performed when priorities and funding allow.

A study to determine the responsible parties at the former **Air Force Plant #62, Middletown (3rd CD)**, found no federal responsibility, based on the indemnification clause contained in the real estate transfer documents.

An archival search report under the Corps ordnance and explosive waste investigation program has been done for

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

SUPERFUND ASSISTANCE – The New England 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.

Regulatory Activities

STATUS OF PROGRAM – Department of the Army permits

are required from the Corps 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 Corps 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 provided at www.nae.usace.army.mil/Missions/Regulatory/PermitsIssued.aspx. Relevant environmental documents are available upon written request.

For information about Corps jurisdiction of wetlands and whether a permit is required for your work contact the Regulatory Division at 978-318-8338 or 978-318-8335 or by email to cenae-r@usace.army.mil or visit the website at: www.nae.usace.army.mil/Missions/Regulatory.aspx.

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 percent of all permits issued in New England are RGPs. Work eligible under the RGPs is generally approved in less than 60 days. The Corps *has issued* the statewide Connecticut *GPs for minimal impact activities to U.S. waters* with a series of multiple GPs covering activity-specific categories. *These GPs became effective on Aug. 19, 2016. The previous GP expired on July 15, 2016. The new GPs are organized into 21 activity-specific GPs.* To view the public notice and the new GPs visit the website at <http://www.nae.usace.army.mil/Missions/Regulatory/PublicNotices.aspx>.

ALGONQUIN INCREMENTAL MARKET (AIM) PROJECT (1st, 2nd & 5th CDs in Connecticut; 2nd, 4th & 5th CDs in Massachusetts; and 2nd CD in Rhode Island)

– The Algonquin Gas Transmission (AGT), LLC was given authorization to conduct work in waters of the U.S. in conjunction with expansion of its existing pipeline system from Mahwah, N.J. and Ramapo, N.Y., to deliver up to 342,000 dekatherms per day of natural gas transportation service to the Connecticut and Massachusetts on June 15, 2016. Work is ongoing along the AGT MLV-19 pipeline in Danbury, Conn. and along the existing I-4 pipeline in Westwood, Dedham and West Roxbury, Massachusetts. Work along the Line 36A in Cromwell and Rocky Hill and the E-1 system in Lebanon, Franklin, Norwich and Montville, Conn. has been completed and site restoration is under way and in compliance with Corps authorizations. Additional information on the status of the various pipeline legs can be found at www.ferc.gov. Use “eLibrary” link, select “General Search” from the eLibrary menu, enter FERC “Docket No.” (CP14-96).

TENNESSEE GAS PIPELINE (1st CD in Conn. & 1st CD in Mass.) –Tennessee Gas Pipeline Company (TGPC) is seeking a Corps permit to conduct work in U.S. waters in conjunction with expanding existing interstate natural gas pipeline systems in Massachusetts and Connecticut. The purpose is expansion of TGPC’s existing pipeline system to increase natural gas delivery capacity and transportation service up to 72,100 dekatherms per day to the U.S. northeast region. Work is proposed in various wetlands and U.S. waters adjacent to the 200-line and 300-line pipelines in the towns of Sandisfield and Agawam, Mass., and Suffield and

East Granby, Conn. for the Connecticut Expansion Project.

In Massachusetts, the project includes 3.8 miles of new 36-inch pipeline looping in conjunction with the “Massachusetts Loop” and 8.3 miles of new 24-inch pipeline looping in Connecticut for the “Connecticut Loop” project segment. Minor work at an existing compressor station (number 261) in Agawam, Mass., and fill for a single permanent access road also is proposed. Work regulated by the Corps involves water body crossings and the placement of permanent or temporary fill in wetlands and streams along the proposed natural gas pipeline route for construction and temporary work areas. Other portions of the proposed project with impact to U.S. waters will be undertaken in the state of New York and this work is the subject of a concurrent permit application to the Corps’ New York District (NAN-2014-00869-UDA).

TGPC includes other facilities that are outside the purview of the Corps such as pipe storage yards, cathodic protection and access roads in upland. These facilities will not impact U.S. waters and therefore do not require a Corps permit.

The Federal Energy Regulatory Commission (FERC) is the lead Federal review agency for this project identified as Docket No. CP14-529-000. FERC is preparing a Draft Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA). FERC issued a Draft Environmental Assessment for the project on Oct. 24, 2015 which described the potential environmental impacts of the project and evaluates alternatives and includes a review and required consultations under Section 7 of the Endangered Species Act and Section 106 of the National Historical Preservation Act, as well as other applicable Federal regulations.

Regulated work proposed by TGPC involves temporary impacts from the discharge of backfill and construction activities over approximately 54.58 acres of waters and wetlands as pipeline trench backfill and discharge of temporary fill or associated disturbance in wetlands and waters for construction in conjunction with the installation of 12.1 miles of new gas pipeline loop known as the “Connecticut Expansion Project.” Included in the project is the construction of 11.91 miles of new pipeline with associated rights-of-way (ROW). New ROW will be obtained and maintained for both of the project segments.

This work will result in direct temporary impact to 54.58 acres of wetlands and 205 linear feet of waters and temporary secondary impact to 25.43 acres of wetlands. The aquatic resources affected by this project are affiliated with, but not limited to the Clam River, Lower Spectacle Pond, Spectacle Pond Brook, Clay Brook, Muddy Brook, DeGraves Brook and Stony Brook. In all it is estimated that 27 water bodies (11 in Massachusetts and 16 in Connecticut) and 68 wetland areas (16 in Massachusetts and 52 in Connecticut) will be impacted.

The Corps is currently evaluating the impacts of the proposed work on aquatic resources. The public notice and other project related information can be viewed at: <http://www.nae.usace.army.mil/Missions/ProjectsTopics.aspx> and clicking

on Connecticut Projects, Tennessee Gas Pipeline Project. For more information on this permit application (file #NAE-2013-02329) contact the U.S. Army Corps of Engineers, New England District, Regulatory Division (ATTN: Cori Rose), 696 Virginia Road, Concord, MA 01742-2751.

THIRD PARTY MITIGATION – In April 2008, the Corps and EPA issued regulations (33 CFR Part 332 Compensatory Mitigation for Losses of Aquatic Resources; Final Rule) on mitigation which became effective in June 2008. These regulations established a “soft” preferential order for mitigation types with mitigation banking and ILF programs preferred over permittee-responsible mitigation.

On Jan. 27, 2011, the National Audubon Society – Connecticut Chapter (NAS-CT) submitted a prospectus for an In Lieu Fee (ILF) program to provide an alternative form of compensatory mitigation for permit applicants in the state of Connecticut. Applicants would pay a fee for impacts which would be used by the ILF sponsor to develop ecologically suitable and appropriate mitigation sites in the same watershed as the impacts. A public notice on the prospectus was issued on Feb. 8, 2011. After review of the public and

Interagency Review Team (IRT) comments, on March 25, 2011 the Corps notified NAS-CT that they could proceed to develop a draft ILF instrument. On Aug. 21, 2013, the New England District commander signed the ILF Instrument, along with the sponsor, NAS-CT. The first payment to the program was received in November 2013.

On Feb. 1, 2016 a Request for Letters of Intent (LOI) was issued to solicit projects to compensate for the impacts which have provided the funds in the program. Ten LOIs were received and nine of those passed the initial screening and were notified that they may proceed to develop a Full Proposal. Because there were no LOIs submitted for the Thames service area, a second request for LOIs in that area was issued in March. Three LOIs were received, all of which passed the initial screening and were notified that they can proceed to develop a Full Proposal. The Project Advisory Committee *visited all the projects for which a full application for funding was received and submitted* recommendations for funding to the Interagency Review Team (IRT) comprised of federal and state agencies and chaired by the Corps. *The IRT will make a decision on which projects to fund in the fall.*

Operating Flood Risk Management Projects and Natural Resource Management

The District has constructed 12 flood risk management protection dams and three hurricane protection projects in Connecticut. Information on each is provided below. The Corps, working with agencies of the state of Connecticut, provides quality outdoor recreational opportunities at each of the seven Corps-operated flood risk management reservoirs located in the state. Lands and waters of these civil works water resource projects are managed to conserve the natural resources as well as for the primary authorized purpose of flood risk management.

For more information on Corps recreation in New England visit www.nae.usace.army.mil/Missions/Recreation.aspx or for Connecticut projects visit the link at www.nae.usace.army.mil/Missions/Recreation/Connecticut.aspx.

BLACK ROCK LAKE (5th CD) on Branch Brook in Thomaston and Watertown was completed in 1971 at a cost of \$8.2 million. More than 2.8 billion gallons of water can be stored behind the 933-foot-long, 154-foot-high dam. To date, \$217.1 million in damages have been prevented. An estimated 150,000 visitors annually enjoy hiking, fishing and hunting on the 319 acres of land and water at Black Rock Lake. Visitors spend an estimated \$0.95 million within 30 miles of the lake. An estimated 27 jobs in the local community are supported by visitors to Black Rock Lake.

For more information call 860-283-4900 or 860-283-5540 or visit www.nae.usace.army.mil/Missions/Recreation/BlackRockLake.aspx.

COLEBROOK RIVER LAKE (1st CD) on the West Branch

of the Farmington River in Colebrook was completed in 1969 at a cost of \$14.3 million. At capacity, the 1,300-foot-long, 223-foot-high dam can impound a lake of 1,185 acres containing 16.5 billion gallons of water. To date, the project has prevented damages of \$92.7 million. Recreational opportunities abound at Colebrook and include boating (with a launching ramp), fishing, ice fishing and hunting. Nearly 158,000 visitors enjoy the recreational pursuits at Colebrook River Lake each year. Visitors spend an estimated \$1.86 million within 30 miles of the lake. An estimated 52 jobs in the local community are supported by visitors to Colebrook Lake.

For more information call 860-379-8234 or visit www.nae.usace.army.mil/Missions/Recreation/ColebrookRiverLake.aspx.

EAST BRANCH DAM (1st & 5th CDs) is situated on the East Branch of the Naugatuck River in Torrington. The 700-foot-long, 92-foot-high earthfill dam was completed in 1964 at a cost of \$3.3 million. With a storage capacity of 1.4 billion gallons of water, the dam can impound a 158-acre lake. To date, more than \$30.6 million in damages have been prevented by East Branch Dam. The state of Connecticut is responsible for operation and maintenance of the 158-acre facility.

HALL MEADOW BROOK DAM (1st & 5th CDs), located on the brook of the same name in Torrington, was completed in 1962 at a cost of \$3.1 million. The 1,200-foot-long, 73-foot-high earthfill dam can impound a 372-acre lake capable of storing 2.8 billion gallons of water. The facility has prevented

damages of \$105.7 million to date. The state of Connecticut is responsible for operation and maintenance of the 9.4-acre facility.

HANCOCK BROOK LAKE (5th CD), on the brook of the same name, was constructed at a cost of \$4.2 million in Plymouth. The 630-foot-long, 57-foot-high earthen dam can create a lake of 266 acres capable of holding 1.3 billion gallons of water. Since it was placed in operation in 1966, it has prevented \$52.5 million in flood damages. More than 110,000 visitors annually enjoy the hiking, fishing and hunting opportunities available at Hancock Brook Lake's 689 acres of land and water. Visitors spend an estimated \$0.13 million within 30 miles of the lake. An estimated four jobs in the local community are supported by visitors to Hancock Brook Lake.

For more information call 203-729-8840 or visit www.nae.usace.army.mil/Missions/Recreation/HancockBrookLake.aspx.

HOP BROOK LAKE (3rd & 5th CDs), situated on the brook of the same name in the towns of Middlebury, Waterbury and Naugatuck, was completed in December 1968 at a cost of \$6.2 million. The 520-foot-long, 97-foot-high embankment can hold back 2.2 billion gallons of water in a 270-acre pool extending 1.5 miles. Hop Brook Lake has prevented damages amounting to \$108.4 million. The year-round, 21-acre conservation pool annually attracts nearly 200,000 visitors who enjoy a variety of recreational pursuits on 536 acres including picnicking, swimming, hiking, fishing, and special permit group events. Visitors spend an estimated \$2.05 million within 30 miles of the lake. An estimated 58 jobs in the local community are supported by visitors to Hop Brook Lake.

For more information call 203-729-8840 or visit www.nae.usace.army.mil/Missions/Recreation/HopBrookLake.aspx.

The 940-foot-long, 178-foot-high **MAD RIVER DAM (1st CD)** is situated on the Mad River in Winchester. Construction of the \$5.4 million earthen dam was completed in 1963, and since that time the project has prevented an estimated \$16.0 million in damages. When full, the lake behind the dam covers 188 acres and can store more than three billion gallons of water. The state of Connecticut operates and maintains Mad River Dam.

MANSFIELD HOLLOW LAKE (2nd CD), on the Natchaug River in Mansfield, was constructed at a cost of \$6.5 million. The 14,050-foot-long, 78-foot-high dam can impound a 49,200-acre foot reservoir, which is equivalent to 16 billion gallons of water. Since it was placed in operation in 1952, it has prevented damages of \$101.6 million. The reservoir area offers fine recreational opportunities, including picnicking, fishing, boating, hunting, and nature study and annually attracts more than 574,900 visitors. Visitors spend an estimated \$8.45 million within 30 miles of the lake. An estimated 237 jobs in the local community are supported by visitors to Mansfield Hollow Lake.

For more information call 860-923-2982 or visit

www.nae.usace.army.mil/Missions/Recreation/MansfieldHollowLake.aspx.

The 810-foot-long, 118-foot-high **NORTHFIELD BROOK DAM (5th CD)** was completed in 1965 at a cost of \$2.9 million. Situated on Northfield Brook in Thomaston, the dam, which features an eight-acre recreation pool, can store an estimated 766 million gallons of floodwater and has prevented damages to date of \$75.8 million. More than 71,000 visitors annually enjoy fishing, picnicking, and hiking at Northfield Brook Lake. Visitors spend an estimated \$0.53 million within 30 miles of the lake. An estimated 15 jobs in the local community are supported by visitors to Northfield Brook Dam.

For more information call 860-283-5540 or visit www.nae.usace.army.mil/Missions/Recreation/NorthfieldBrookLake.aspx.

SUCKER BROOK DAM (1st CD), on a brook of the same name in Winchester, was completed in 1971 at a cost of \$2.3 million. The 1,160-foot-long, 68-foot-high earthen dam can impound a lake covering 53 acres capable of storing 482 million gallons of water. The state of Connecticut is responsible for the operation and maintenance of Sucker Brook Dam.

THOMASTON DAM (5th CD) is situated on the Naugatuck River in Thomaston. Completed in 1960 at a cost of \$14.3 million, the 2,000-foot-long, 142-foot-high earthen dam can impound a lake covering 960 acres capable of storing 13.7 billion gallons of water. Thomaston has prevented more than \$828.9 million in flood damages. An estimated 200,000 visitors annually enjoy picnicking, fishing, hunting, dirtbiking and snowmobiling at Thomaston Dam's more than 849 acres of land and water. Visitors spend an estimated \$1.33 million within 30 miles of the lake. An estimated 37 jobs in the local community are supported by visitors to Thomaston Dam. A \$216,622.00 contract for Leadmine Brook Bridge repairs was completed in May 2016.

For more information call 860-283-5540 or visit www.nae.usace.army.mil/Missions/Recreation/ThomastonDam.aspx.

WEST THOMPSON LAKE (2nd CD) is located on the Quinebaug River in Thompson. Construction of the \$7 million facility was completed in 1965, and since that time the facility has prevented more than \$56.4 million in flood damages. The 2,550-foot-long, 70-foot-high dam can impound a 1,250-acre pool capable of storing 8.3 billion gallons of water. Picnicking, hiking, boating, fishing, camping, and hunting are enjoyed by more than 96,300 visitors annually spending an estimated \$1.51 million within 30-miles of Thompson. Visitor trip spending supports 42 jobs in the communities surrounding the lake. The Corps manages 2,059 acres of land and water at West Thompson Lake stretching six miles from Putnam to the Massachusetts border. Three picnic shelters are popular for outdoor weddings, family reunions and other group functions. West Thompson Lake Campground offers 24 campsites (11 basic sites, 11 premium sites with electrical and water hookups,

and two lean-to shelters) in a quiet, wooded environment.

For more information call 860-923-2982 or visit www.nae.usace.army.mil/Missions/Recreation/WestThompsonLake.aspx.

At **NEW LONDON (2nd CD)** facilities to provide hurricane protection to the Shaw Cove area of this northern Long Island Sound community were completed in 1984 at a cost of \$12 million. The project, operated and maintained by the city of New London, provides protection both from high tides caused by coastal storms and hurricanes, and from interior flooding caused by Truman Brook in the industrial and commercial area in the vicinity of Shaw Cove and New London Harbor. Rock protected earthfill dikes, concrete floodwalls, a pumping station and a pressure conduit to evacuate interior drainage are features of the project. In a storm of the magnitude of the 1938 hurricane, New London would afford \$9.6 million in damage prevention.

In Stonington, the **PAWCATUCK-STONINGTON HURRICANE PROTECTION PROJECT (2nd CD)** is located on the West Bank of the Pawcatuck River at the Rhode Island - Connecticut state line. The \$859,000 project was completed in 1963. The project consists of 1,915 feet of earthen dike, 940 feet of concrete wall, two vehicular structures and a pumping station. The works afford protection to a 31-acre industrial area and are operated and

maintained by the town of Stonington.

Construction of the **STAMFORD HURRICANE PROTECTION BARRIER (4th CD)** at Stamford was completed in 1969 at a cost of \$14.5 million. The project consists of three principal features. The West Branch Barrier, which protects the area between the West and East Branches, includes a 1,340-foot concrete wall and a 1,950-foot-long, rock-faced earthen dike. The East Branch Barrier, which connects to the West Branch and extends across the mouth of the East Branch, includes 2,840 feet of rock-face earthen dike and a 90-foot-wide navigation gate. The Westcott Cove Barrier, which protects the residential area of Rippowam Street and skirts Westcott Cove in Cummings Park, includes 4,200 feet of rock faced earthen dike. Damages amounting to \$39.4 million have been prevented to date.

A \$438,137 contract to replace and upgrade security fencing *was completed in July 2016*. A \$40,437.00 contract *to replace the main electrical transformer is scheduled for October 2016*.

For more information call 203-729-8840 Ext. 370 or visit www.nae.usace.army.mil/Missions/CivilWorks/FloodRiskManagement/Connecticut/StamfordHurricaneBarrier.aspx.

