United States Department of the Interior

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In Reply Refer To:
FWS/Region 5/ES-ERR

JUN 10 **2013**

Memorandum

To: Project Leader, New York Field Office

From: Assistant Regional Director - Ecological Services

Subject: Draft Restoration Plan Addendum and Environmental Assessment for Mattiace Petrochemical Company Superfund Site

This is to inform you that the Regional Director, as Authorized Official, has approved the Draft Restoration Plan Addendum and Environmental Assessment for Mattiace Petrochemical Company Superfund Site. Please initiate the minimum 30-day public comment period at your earliest convenience.

We appreciate the efforts of you and your staff in accomplishing restoration under the Natural Resource Damage Assessment and Restoratio1 (NRDAR) program. If you have any questions or need further assistance. please contact Robin Hcubel. Regional NRDAR Coordinator. at 413-253-8630.

Attachments

DRAFT RESTORATION PLAN AND ENVIRONMENTAL ASSESSMENT ADDENDUM

MATTIACE PETROCHEMICAL COMPANY SUPERFUND SITE
GLEN COVE, NASSAU COUNTY, NE\1\1 YORK

April 1, 2013, Addendum Revised from
March 7, 2007, Final Restoration Plan

Prepared by:

United States Fish and Wildlife Service

on behalf of the

U.S. Department of the Interior,
National Oceanic c1nd Atmospheric Administration,
and
New York State Department of Environn1ental Conservation

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Preamble

This Addendum to the "2007 Mattiace Petrochemical Superfund Site Final Restoration Plan " (USFWS 2007}has been developed to summarize a new restoration alternative that has been selected by the Trustees. This new alternative is necessary because the project proponent for the restoration project alternative selected in the 2007 Final Restoration Plan has notified us that they are no longer able to perform the proposed work. The Trustees are now proposing an alternative that will fund the following three projects:

- Wetland restoration and enhancement at Seatuck National Wildlife Refi.1g,
- Coastal forest restoration at Theodore Roosevelt Sanctuary, and
- ExxonMobil grassland and wet meadow restoration.

A. Introduction

In June 2003, the United States Fish and Wildlife Service(USFWS), on behalf of the United States Department of the Interior (DOI), the National Oceanic and Atmospheric Administration (NOAA) of the United States Department of Commerce, and the New York State Department of Environmental Conservation (NYSDEC), on behalf of the State of New York, collectively referred to as the "Trustees," settled a natural resource damage claim with the Responsible Parties for the Mattiace Petrochemical Company Superfund Site (the Site) located in Glen Cove, Town of Oyster Bay, Nassau County, New York.

The Trustees sought this settlement as compensation for injuries to natural resources due to the release of environmental contaminants from the Site. We are required to use settlement fonds to compensate tor those injuries by restoring natural resources, supporting habitat, and/or services provided by the injured resources;. The Comprehensive Environmental Compensation and Liability Act (CERCLA), 42 U.S.C. §9601, *et seq.*, which designates natural resource trustees, requires that, before settlement monies can be used for such activities, we must develop and adopt a Restoration Plan, and that in doing so, there must be adequate public notice and opportunity for hearing and consideration of all public comment.

The Trustees published and distributed a Draft Restoration Plan in 2006 and sought comments on it. We published a Notice of Availability of the Draft Plan in the Federal Register and the Oyster Bay *Enterprise-Pilot.* We received no comments on the Draft Rest()ration Plan within the 30-day comment period. The Final Restoration Plan was published in March 2007 (http://www.fws.gov/northeast/nyfo/ec/nrda.htm). The 2007 Restoration Plan presented a number of restoration projects, as summarized in Section E. The Beaver Dam Creek Tributary Restoration Project was selected as the preferred alternative. The project proponent for the Beaver Dam Creek

Tributary Restoration Project is no longer able to complete this project. In 2011 and 2013, the Trustees solicited additional project alternatives from the Long lsland National Wildlife Refuge, Theodore Roosevelt Sanctuary and Audubon Center, Friends of Oyster Bay, Huntington-Oyster Bay Audubon Society, No1ib Shore Land Alliance and the Town of North Hempstead. We have reviewed projects submitted to us, as well ,is those previously submitted to us, and selected a new preferred alternative, which is presented in Section F below.

8, Background

The 2-acrc (0,8 ha) Mattiace Petrochemical Site is an inactive chemical distribution facility located on Long Island on Garvies Point Road, about 166 yards (152 m) north of Glen Cove Creek (Figure 1). From the mid- l960s until 1987, Mattiace received chemicals by tank truck and redistributed them to its customers, The company also operated the M&M Drum Cleaning Company on the Site until 1982, During its operational period, the Mattiace prope1ty contained a Quonset hut, shed, concrete loading dock, and approximately 56 storage tanks, most or which were underground. In 1987, after seven years of failed negotiations and litigation regarding various waste-handling ,md environmental infractions, the State of New York seized the property. At that time, many drums and tanks of organic, acid, and alkali liquids remained (EPA 2010, NYSDEC 1998).

The primary migration pathways from the Site to habitats of concern in Glen Cove Creek were directly discharged through underground pipes, groundwater discharge, and surface water transport When the facility was in operation, overflowing chemicals and storm water were transported to a solvent/stormwater separator and ultimately discharged to the creek, Runoff eroded soil and created gullies in the driveway that served to direct flow towards Garvies Point Ro,1d. Garvics Point Road is connected to Glen Cove Creek via a storm sewer ,md underground pipe. In 1980, Matliacc obtained a state pollution discharge elimination permit to discharge stormwater overland. The permit expired in 1982 and was not renewed due to permit violations. Contaminated groundwater may have contributed to surface waler contamination, Additionally, large leaching pools were constructed on-site to collect surface water runoff and to le,1ch solvents i nt<i the ground,

In 1988, the U.S. Environmental Protection Agency (EPA) implemented an emergency removal action to secure the Site and remove more than 120,000 gallons of hazardous liquids, Samples were collected to characterize on-site contaminants, and l 00,000 gallons of flammable liquids. 20,000 gallons of contaminated water, and 1,800 gallons of liquids containing polychlorinatcd biphenyls (PCBs) were removed from the Site. Empty chemical containers were crushed and sent to an off site incineration facility, The owners reclaimed cylinders and some empty tanks, All other hazardous materials were transported to EPA-approved disposal facilities.
Aft.er a geophysical survey was conducted during the Remedial Investigation, EPA found and characterized the contents of buried drums on the west central part of the Site EPA signed a

Record of Decision (ROD) in 1990 specifically for removal and off-site treatment and disposal of d1ums and contaminated soil in the drum burial area. In 1992, EPA completed excavation and off-site disposal of approximately 400 buried drums and contaminated soil.

The EPA completed a comprehensive remedial investigation and feasibility study (RI/FS) of soil and groundwater pollution, and signed a ROD in June 1991 selecting in situ vapor extraction of soil, limited excavation of soil contaminated with pesticides, removal of all above and below-ground tanks and cisterns, and groundwater pumping and trcatn1ent as the selected remedy. The removal of all tanks, cisterns, and associated piping was completed in 1996 and EPA initiated construction of an integrated ground water and soil vapor treatment facility in October 1997. In August 1998, EPA completed construction of a groundwater/soil vapor integrated treatment facility and began long-term operation in September 1999. The facility will remediate an estimated 28,000 cubic yards of contaminated soil and one-half billion gallons of contaminated groundwater.

In July 2003, a private company assumed responsibility for performing long-tern, operation of the facility under1, 11 agreement with EPA and potentially responsible parties (PRPs). EPA provides oversight of the facility operation as part of the agreement. As of 2010, the PRPs had proposed a change in the remedy, which involves phytoremediation and air sparging treatment (USEPA 2010).

C. Natural Resources and Impacts To Those Resources

Glen Cove Creek and Hempstead Harbor are estuarine systems with associated wetlands. Hempstead Harbor has been designated a significant coastal fish and wildlife habitat by the New York State Department of State (NYSDOS 2005) and as Essential Fish Habitat for 15 species by NOAA's National Marine Fisheries Service (NOAA 2005). The USFWS (1997) recognizes the western harbors of Long Island, including Hempstead Harbor, as significant habitat areas for many fish and wildlife species, including wintering waterfowl and wading birds. Anadromous, catadromous, euryhaline and marine finfish , and inve1tebrates also use Hempstead Harbor and Glen Cove Creek. Some of these species have commercial and recreational importance.

Hempstead Harbor is an important wintering (November-March) area for waterfowl species. Mid-winter aerial surveys of waterfowl abundance for the ten-year period 1987-1996 indicate ,1verage concentrations of about 400 birds in the bay each year (1345 in peak year), including approximately 135 greater and/or lesser scaup *(Aythya affinis)* (420 in peak year) and 95 American black ducks *(Anas rubripes)* (295 in peak year), along with lesser numbers of Canada goose *(Brania canadensis)*, brant *(Branta bernida)*, common goldeneye *(Bucephala clangula)*, canvasback *(Ayrhya valisineria)*, red-breasted merganser *(:Hergus sel'l'ator)*, mallard *(Anas plmyrhynclws)*,bufflehead *(Bucephala albeola)*, American widgeon *(Anas americana)*, and

long-tailed duck *(C/a11gula hyema /is).* Pied-billed grebe *(Podilymhus podiceps)* and common loon (*Gavia immer)* arc regular winter visitors to Hempstc.id Harbor (NYSDOS 2005).

ln addition to waterfowl, Hempstead Harbor supports a diverse assemblage of other bird species, including great egret *(Ardea alba),* snowy egret *(Egretta thula),* black-crowned night-heron *(Nycticorax nyetucirax),* laughing gull *(Larus atricilla* ring-billed gull *(Larus delawarensis),* great black-backed gull *(Lams marinus),* he1Tinggull *(Larus argentaws),* double-crested cormorant *(Phalacrocorax auritus),* red-winged blackbird *(Agelaius phoeniceus),* belted kingfisher *(Ceryle alcyon),* red-throated loon *(Gavia stellata),* and horned grebe *(Podiceps auritus).* Osprey *(Pandion haliaetus)* currently nest on constructed platfom1s as well as on previously existing nesting sites (NYSDOS 2005).

A diversity of rare bird species have also been observed visiting Hempstead Harbor. These species include peregrine falcon *(Falco peregrinus),* roseate tern *(Sterna dougalllii),* black tern *(Chlidonias niger),* piping plover *(Charadrius melodus),* short-eared owl *(Asio jlammeus),* least tern *(Sterna antillarum),* common tern *(Slerna hirwulo),* bald eagle *(Haliaeetus leucocephalus),* northern harrier *(Circus cyaneus),* sedge wren *(Cistothorus platensis),* American bittern *(Rotaurus lentiginosus),* black skimmer *(Rynchops niger),* sharp-shinned hawk *(Accipiter striaws),* Cooper's hawk *(Accipiter cooperii),* northern goshawk *(Accipiter gentilis),* common nighthawk *(Chordeiles minor),* red-headed woodpecker *(Melanerpes erythrocephalus),* horned lark *(Eremophila alpestris),* golden-winged warbler (*Vermivora chrysoptera),* vesper sparrow *(Pooecetes gramineus),* grasshopper sparrow *(Ammodramus savannarum),* and seaside sparrow *(Ammodramus maritimus)* (NYSD OS 2005).

Contaminants of concern at the Mattiace Petrochemical Site included volatile organic carbons (VOCs) and phenols contained in groundwater discharge and surface water transpo1t from the Site to creek habitats supporting trust resources (EPA 20 10). Hazardous substances were detected in on-site soils, sediment, surface water, and groundwater at levels that potentially reduce survivability of algae, benthic invertebrates, fish fry, and communities of other animals (e.g. shellfish, fish, birds, and mammals) that rely on them for food.

D. Natura l Resource Damage Settle1nent

The Trustees analyzed injury Lo the 38-acre area impacted by Site-related contaminants using a Habitat Equivalency Analysis (Unswo1t h and Bishop 1994). After negotiation with the Responsible Parties, we reached a settlement based on a 5-acre wetland restoration goal. This settlement was formalized in a Consent Decree signed by the United States Government, the Stateof New York, and the Responsible Parties in June 2003. As a result of the settle1J1e nt, the Responsible Parties forwarded $ 194,156.53 (the estimated cost of a 5-acre wetland restoration) to the DOI to compensate for the habitat degradation. The restorat ion account for the Site as of September 2012, due to the accrual of interest, currently contains about $225,000. Of those funds,

S181,000.00 is available for restoration activities, with the balance for project pla1ming, implementation, and monitoring.

E. Proposed Restoration Projects - 2007 restoration plan

The primary goal of restoration ,is part of natural resource damage assessments is to compensate for natural resources which were injured. Restoration includes returning an injured resource to its prior condition, as well as acquisition of other resources to compensate for those which were injured. The Trustees ,ire required to assess a reasonable number of possible restoration projects. A project may consist or a single action or a set or actions to he unde1t,iken. To identify potential projects, we originally consulted various program areas within the Service, NOAA 's Restoration Center, the NYSDEC, the New York State Department of Parks and Recreation, the Department or Maritime Services - Town of Huntington, and Ducks Unlimited. Based on the input received. we identified the following potential restoration projects.

.4.lrernative I - Glen Cove Creek Restoration

The Trustees considered performing a restoration project in Glen Cove Creek, which is in the immediate vicinity of the Site. However, the Glen Cove Creek shoreline is highly developed and contains a significant portion of high-walled, steel-sheet, and wood pilings along the banks, limiting shoreline and/or wetland restoration options of a single project to less than the minimum 5-acre restoration goal. Therefore, a restoration project in Glen Cove Creek was not given further consideration.

Alternative 2- Mill Dam Pond Revitalization Restoration Projects

Mill Dam Pond (Pond) is located about 11 mi east of the Site, in the Village of Huntington, Suffolk County, New York, immediately south of Mill Dam Road, west of New York Avenue, and east of Shore Road. The 9-acre Pond receives large volumes of stormwater flow from the Wall Street and New York Avenue drainage areas. The Pond has tilled with sediment from decades of untreated stormwater flow. The two specific Mill Dan, Pond restoration projects considered by the Trustees were:

2a. Mill Dam Pond fish passage - installation of a structure to facilitate movement of fish into Mill Dam Pond from the Harbor would open up 7 acres of tidal wetland for use by fish and wildlife.

2b. Mill Dam Pond wetland enhancement - enhancement or 4.2 acres of tidal wetland habitat around the perimeter of Mill Pond.

The Trustees did not select these projects because the Mill Dam Pond fish passage project greatly exceeded our budget. We had concerns that development and stormwater runoff may jeopardize wetland enhancement around the pond perimeter.

Alternative 3 - Beaver Dam Creek Tributary Restoration

The Beaver Dam Creek Tidal Marsh Restoration is a NOAA community-based initiative involving multiple partners including the NOAA Community-based Restoration Program, Ducks Unlimited, the Post Morrow Foundation, the Town of Brookhaven, the Suffolk County Department of Public Works, and the Long Island National Wildlife Refuge Complex of the U.S. Fish and Wildlife Service. The proposed project would restore 5 acres of tidal wetland. This project was selected as our preferred alternative in 2007.

Alternative 4 – Phillips Mill Dam Fish Passage

North and South Phillips Mill Pond Dams are located at the southeast corner of Caleb Smith Stale Park Preserve, Smithtown, Town of Smithtown , Suffolk County, New York. The approximately 5-foot-high dams are at the head of tide al a common boundary between the park and privately-owned land. The proposed restoration project would include dam repair or replacement and installation of fish passage. The cost of il1is alternative fa r exceeded the available funds. This project was not given further consideration.

Alternative 5 - New Mill Pond Dam Fish Passage

New Mill Pond Dam is located in Blydcnburgh County Park, Smithtown , Town of Smithtown, Suffolk County, New York. The dam impounds approximately 100 acres of high quality water. This proposed project involved implantation of fish passage al this dam. However, fish passage would be needed downstream at Phillips Mill Pond Dam to make this project biologically productive. This project was not given further consideration.

Alternative 6 - No Action Alternative

Federal regulations require natural resource trustees to consider a no action restoration option. Under the No Action Alternative, no action would he taken to restore resources injured due to contamination or remedial activities associated with the Site.

Preferred Alternative in 2007 Restoration Plan

Based on an evaluation and comparison of project alternatives for the 2007 Final Restoration Plan for the Mattiace Petrochemical Superfund Site, the Trustees selected the Beaver Dam Creek Tributary Restoration project as the" Preferred Project" tor implementation. The project proponents have since notified us that they are no longer able to complete this project.

F. Proposed Restoration Projects - 2013 Addendu1n to Restoration Plan

The Trustees have evaluated additional alternatives as part of this Addendum to the Restoration Plan. They arc Alternatives 7 - 12.

Alternative 7- Wetland and Shoreline Restoration at Seatuck National Wildlife Refuge

Seatuck National Wildlife Refuge (NWR) is one often management units within the Long Island NWR Complex. Seatuck NWR was acquired in 1968 as a donation from the Peters family under the Migratory Bird Conservation Act. The Refuge is located in the Town of Islip on the south shore of Long Island and consists of 209 acres bordering the Great South Bay, separated from the Atlantic Ocean by Fire Island. Seatuck is approximately 50% wetland and 50% upland. Upland ,1reas consist predominantly of cool and *warm* season grasses, oak-pine forest, red maple stands, and upland shrubs. The wetlands of Seatuck consist primarily of salt marsh and some freshwater wetlands that provide important habitat lor wintering American black duck and Atlantic brant, migratory shorebirds, and other waterbirds. More than 200 species of birds, as well as a variety of mammals and fish, have been documented on the Refuge.

Proposed projects total ing $ 107.500 include:

7A. Salt Marsh Restoration and Enhancement: Open Marsh Water Management (OMWM) techniques will be improved on 66 acres of tidal marsh and 16 ac res of emergent marsh by restoring marsh hydrology through enhanced tidal action and draim1ge of areas with excessive amounts of water and removal of dredged material. Initial cffo1ts will involve collecting baseline data on elevation and landscape changes over time and performing hydrologic modeling to determine tidal flow. Post-project monitoring will be conducted to ensure goals are met. Refuge staff and the Regional Maintenance Action Team will work with their partner Suffolk County, to remove ditch plugs and transpo1t dredged material from depositional areas in the eastern portion of the marsh to the western po1tion of the marsh to fill depressions in the saltmarsh in order to restore optimal marsh elevation. This dredged material consists of approximately 145,000 cubic yards that was previously deposited on the Refuge marsh many years ago. The Refuge does not plan to transport any of the dredged materi,1!off Refuge because it is viewed as a resource to use within the marsh system 10 nourish and build up areas that need attention. Upon completing maintenance to the marsh surface, ditches and pannes as needed, the Refuge will collect wrack line material and seeds to cover exposed areas and encourage vegetation growth. Local native marsh plants may also be purchased to reinforce vegetation growth, if needed.

Removal of the dredged material from the marsh will allow the restoration of 5 acres of emergent marsh. Additional benefits will be provided to the remaining 77 acres of tidal marsh and emergent wetland through the removal of ditch plugs and seeding. Overall, the Seatuck NWR marsh should

have increased natural function as habitat for tidal marsh species and increased capacity to help protect adjacent uplands during coastal storms and other climatic events. Post-project monit.01ing to evaluate marsh elevation, hydrologic conditions, vegetation and wildlife response will be conducted to ensure. goals are met.

Project costs are S77,500, which includes $60,000 for labor from Refuge staff and the Regional Maintenance Action Team, $15,000 for environmental consultant ser vices , and $2,500 for plant mate1fa ls. Suffolk County will contribute in-kind services (labor and equipment).

Background: Beginning in 1957, Suffolk County was pem1itted to deposit dredged material (~122,000 cubic yards) from the Champlin Creek channel on ,m upland dike of the Peters Estate. Deposition of dredged material continued on the Refuge during 1980-1987; an estimated 5,000-10,000 cubic yards was deposited annually on the upland dike among emergent marsh consisting primarily of cattail, bulrush, and now *invasive Phragmites australis*. An estimated total of 145,000 cubic yards ofmate1ial has been deposited on the marsh over the years. Disposal or dredged spoil on the upland dike area has likely contributed to the colonization and spre,1d of non-native, invasive species. Removing the dredged material would enable the return of wetlands and native vegetation that will help stabilize the soil and provide cover and nesting areas for birds and other wildlife.

In 1984 , OMWM was conducted in 49 acres of salt marsh at Seatuck NWR. Techniques included cleaning filled ditches, plugging ditches, and cre,1ting radial spurs (shallow ditches) from existing ponds and deep ditches to mosquito breeding ponds. However, the marsh has subsequently become water Jogged, holding excess amounts or water in marsh pannes. Additional impacts of sea level rise and maintenance dredging of a nearby channel may also be factors that have contributed to increased amounts of water in the marsh. Modifying previous OMWM methods will restore marsh hydrology through tidal action and drainage of water logged areas.

7B. Invasive Species Management: Manage non-native invasive plants including Phragmites *(Phragmites australis)* and Chinese silvergrass *(Miscanthus sinensis)* by prescribed burning and herbicide use, followed by planting of native species on approximately 50 acres of the Refuge. The Refuge will work with a licensed invasive plant contractor and regional and fire crews to cond11ct aggressive control of Phragmites (46 acres) and Chinese silvcrgrass (4 wetland acres) through a variety of techniques (spraying, burning, mowing, etc.). Upon control and clearing of dead canes, the Refuge expects the return of the native seed bank including *Spartina altern/flora, Schoenoplectus robustus,* and *Typha spp.* If needed, the Refuge may employ planting to strengthen the establishment of native species and prevent the return of non-native species. Native habitat will be restored and enhanced to benefit fish, w,1terfowl, wading birds, and other wetland species, and increase plant species diversity. Post-treatment evaluation will be conducted through photopoint monitoring and vegetation surveys in the previously infested areas. The cost of this project is $30,000 - $20,000 for an herbicide application contractor and $10,000 for a prescribed burning crew, supplies, and travel expenses.

Background: Phragmites has infested approximately 46 acres of tidal marsh habitat at Seatuck NWR. Phragmites control was most recently conducted in 2010 and 2011 by a licensed contractor who chemically treated the Phragmites with the aquatic herbicide, Aquamaster. Photopoints were established in areas invaded by Phragmites and photopoint monitoring is being done to help determine treatment efficacy and changes over time. In addition, Chinese silvergrass is also an issue along wetland boundaries on the Refuge. Chinese silvergrass is primarily an invader of grasslands, road sides, and forested edges, and can thrive in moist areas. At Seatuck, Chinese silvergrass has infested upland areas within the vicinity of a tidal channel and along small ditches on approximately 10 acres of the Refuge. Seed heads were clipped from plants in grassland areas in 2009 and 2010, while priority sensitive uplands areas were treated with herbicide in 2011.

Alternative 8 - Theodore Roosevelt Sanctuary and Audubon Center Coastal Forest Restoration

Restore coastal forest habitat at TI1codore Roosevelt Sanctuary and Audubon Center by managing invasive species in the understory via a variety of chemical and mechanical methods, followed by planting of native species. The understory of the forest sanctuary has been invaded by non-native, invasive species such as Norway maple, English ivy, and Japanese spurge. Invasive species will be initially eliminated using (wo applications of herbicide, with post-spraying mechanical and manual means to fu1i her remove invasive species. Native species such as downy serviceberry, flowering dogwood, while oak, swamp white oak, American holly, sweet pepperbush, joe-pye weed, and broom sedge will be planted in treated areas. Approximately 5,120 2-inch plugs, 900 l-quart herbaceous plants, 465 1-gallon shrubs or trees, 125 3-gallon shrubs or trees, and 357-gallon trees will be planted.

Project costs are $38,400 to be matched with a maximum of$34,977.27 from the National Fish and Wildlife Foundation and additional matching funds and in-kind services (~S13,210) from Restaino Design, David Workman Grant, and the Charles Piper Cot Award Internship, the Chingos Foundation, and Theodore Roosevelt Sanctuary and Audubon Center. Approximately $19,812 would be spent on the purchase of plants and supplies, $38,500 on two contractual applications of herbicide, and up to $ 15,063.27 for staff time for mechanical invasives treatment and planting and maintenanceof native species.

Background: The Theodore Roosevelt Sanctuary and Audubon Center is Audubon's first and oldest bird sanctuary. It supports rare old growth trees including American tulip, oak, red maple, beech, and hickory. Non-native invasive species have invaded the sanctuary, out-competing the native understory species and inhibiting growth of native trees.

Alternative 9 – Grassland and Wet Meadow Enhancement at Exxon Mobil Site

Create native short grass and tall grass ecological communities and wet meadow on approximately three acres at the former ExxonMobil site in Cold Spring Harbor. Specific project activities

include soil preparation, application of compost seeding with grassland and wildflower species, and planting plugs and container herbaceous and shrub/tree species. Total requested funding is $35,000, with $35,000 in matching funds from ExxonMobil.

Background: The North Shore Alliance has proposed habitat restoration on a former ExxonMobil facility that has been remediated. The property is approximately eight acres in size and will eventually become a nature preserve open to the public. Other project components include slm1bland enhancement, tidal salt marsh restoration, spit dune restoration, and parking.

Alternative 10 – Stream Restoration along Beekman Creek

Re111ove and dispose of two in-stream concrete dams and install eight rock vortex weirs to concentrate and deepen stream flow, create plunge pools, and reduce bank erosion. Remove invasive and exotic plants along Beekman Creek and re-plant native, non-invasive tree and slm1b species. Total project cost is $42,200, with $25,000 to be spent for removing existing concrete check dams and installing eight rock vortex weirs, $7,200 for native plant materials, $9,000 for surveying, engineering oversight, and project management by Friends of the Bay, and $1,000 for removing trash and invasive species along the stream charn1el.

Background: Beekman Creek is a small tributary to Mill Creek that flows into Oyster Bay. The stream supports native brook trout, although approximately 600 feet of the creek downstream of the proposed project area flows within a culvert.

Alternative 11 – Native Grassland Restoration at Underhill Preserve

Restore approximately 22 acres of meadow and grassland habitat at the Underhill Preserve in Jericho, New York. Specific project activities include assessment of existing site conditions and habitat needs, site preparation (mowing, disking, plowing), seeding with native grasses, and girdling/cutting of trees. Requested funding is $39,225.

Background: The Underhill Preserve is an open space area located within the Town of Jericho. The preserve is co-owned by the Town of Oyster Bay, State of New York, and Nassau County and this project is proposed by the Huntington-Oyster Bay Audubon Society. The grasslands and meadows arc threatened by invasive species such as garlic mustard, Japanese honeysuckle, and porcelain berry. Restoration and protection of the biological diversity of this preserve would protect one of the largest contiguous grasslands in Nassau County.

Alternative I2 - Hempstead Harbor Cove Wetland Restoration

Use herbicide to control *Phragmities australis* on approximately five ,1cres in Hempstead Harbor Cove in Port Washington, New York. Herbicide treatment would be followed by planting of

approximately 2,000 *Spartina* plugs, silt fencing, and goose exclusion fencing. The Project cost is $25,000.

Background: The Town of North Hempstead is proposing this project as a follow-up restoration activities that have been conducted al this site by other agencies. Previous restoration efforts have been impaired by re-growth of Phragmites and storm damage.

Preferred Alternative for 2013 Restoration Plan Addendum

The Trustees propose to implement Alternative 7 (Seatuck NWR wetland enhancement and restoration), Alternative 8 (Theodore Roosevelt Sanctuary coastal forest restoration), and Alternative 9 (grassland and wet meadow enhancement at ExxonMobil site) as our preferred alternative. ln considering alternative, we evaluated projects by the extent to which the alternative restores, replaces, or acquires the equivalent natural resources that were injured. Factors we considered included:

Proximity of restoration project to injured resources.

- Cost effectiveness.
- Extent to which the restoration project will enhance the public's ability to use, enjoy, or benefit from the natural resources.
- Extent to which the project is expected to be successful.
- Compliance with applicable Federal, State, Tribal, and local laws and policies.
- Ability of resources to recover with or without restoration project.
- Potential effects of the project on human health and safety.
- Potential for additional injury resulting from the proposed restoration activities.

We selected projects that restore a variety of habitats similar to those impacted al the Mattiace Sitein a cost-efficient manner with a high likelihood ɒl success. We propose to restore 5 acres of emergent wetland at the Seatuck NWR (Alternative 7) to directly compensate for the 5 acres of wetland impacts associi1ted with the M,1ttiace Sile, with enhancement of an additional77 acres of tidal marsh and emergent wetland at Seatuck NWR . We further propose to restore 14 acres of coastal forest habitat at Theodore Roosevelt Sanctuary and Audubon Center, a property in close proximity to the Mattiace Site (Alternative 8) and restore approximately 3 acres of wet meadow and grassland at the ExxonMobil site, also in dose proximity lo the Mattiace Site (Figure 1).

<u>The alternatives that were not selected arc discussed below:</u>

<u>No-action Alternative-</u> Restoration of the injured resources under the no-action alternative would occur only through natural processes and existing or future programs that are unrelated to this restoration plan. The no-action alternative would not increase the rate of restoration of the injured

natural resources and habitats beyond what will result from natural processes and existing or future programs.

Alternative 10. Beekman Creek - This alternative would improve habitat along approximately 500 to 1,000 feet of creek which may benefit brook trout and other aquatic species. This project was not selected because of concerns that a culverted section of this creek may impede fish passage tothe reach that is to be restored. There also are concerns that the rock structures and other habitat improvements may not provide benefits commensurate with the cost.

Alternative 11 Underhill Grassland – This alternative would restore native grassland. This project was not selected because the habitat to be restored is less similar to the habitat impaired at the Mattiace Site than projects such as the Seatuck project and the proposed project is located in a more inland location, distant from the Mattiace Site.

Alternative 12. Hempstead Harbor Cove Wetland Restoration - This alternative would restore wetland habitat primarily by controlling invasive species. It was not selected because, although the habitat is similar to the habitat impaired at the Mattiace Site and located in reasonable proximity to the Mattiace Site, there are concerns about the success of the project since invasive species management has been performed at this site before.

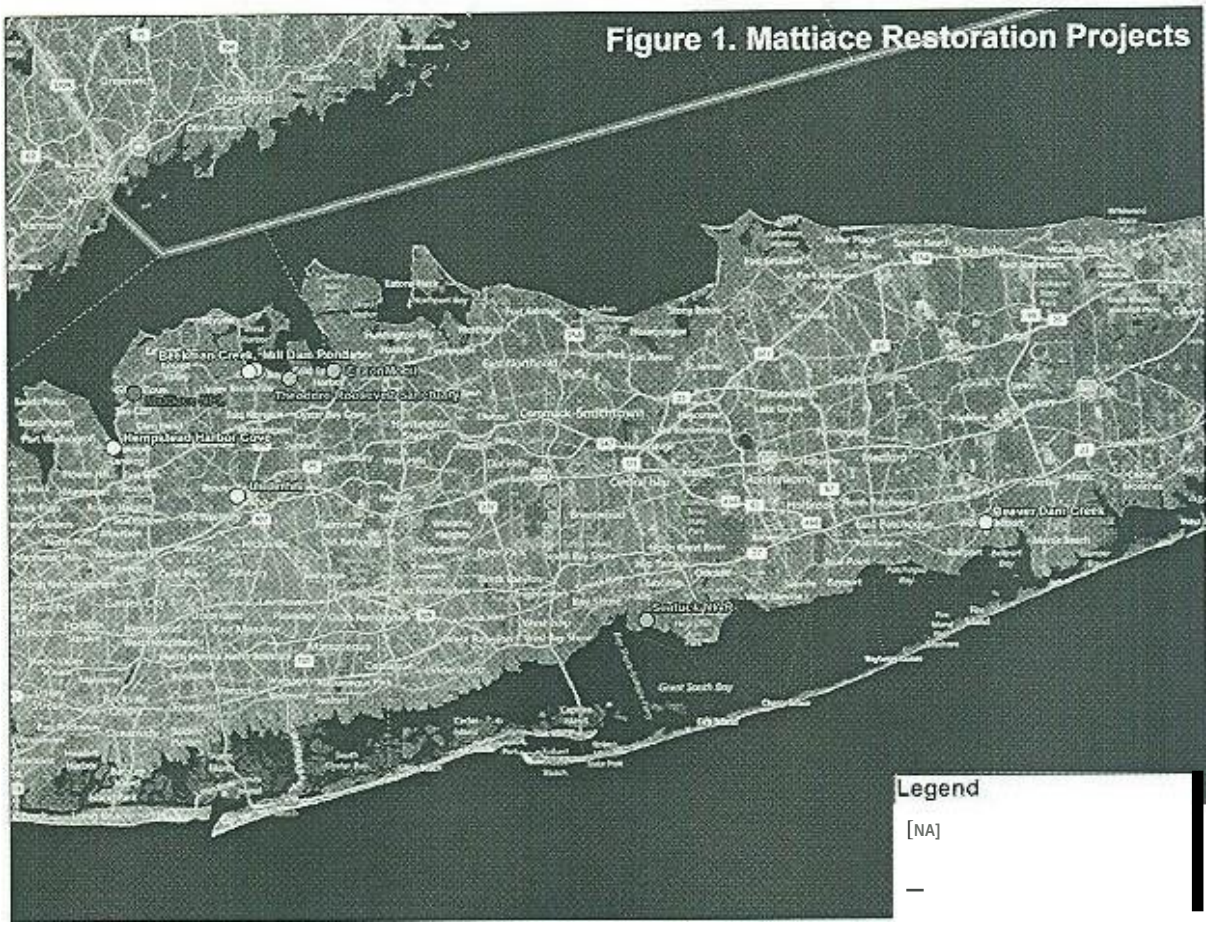
Table 3. Summary of Differences in Feasible Project Alternative 2a, 2b, 3, 7, 8, 9, IO, 11, 12, and the No Action Alternative. The Prefe1Ted Alternative consists of Alternative 7, 8, and 9. Sec Figure 1

Project	Acres/ Feet Restored	Type Habitat	Cost
Original Restoration Plan Viable Alternatives (2007}			
No Action	0	None	SO
Alt 2 a: Mill Dam Pond Fish Passage	7 acres	Tidal wetland restoration	$527,000
Alt 2b: Mill Dam Pond Wetland Enhancement	4.2 acres	Tidal wetland enhancement	$ 168,000
Alt 3: Be ver Dam Creek Restoration (preferred alternative in 2007 Restoration Plan - no longer viable)	5+	Tidal wetland restoration	$155 000
Restoration Plan Addendum Viable Alternatives (2013}			
Alt 7: Seatuck NWR Wetland Enhancement & Restoration	77 acres 5 acres 50 acres	Salt marsh enhancement Salt marsh restoration Invasive species management	$107,500
Alt 8: Theodore Roosevelt Sanctuary Coastal Forest Restoration	14 acres	Coastal forest restoration	$38,500 ($86,687 total cost)
Alt 9: ExxonMobil Grassland and Wet Meadow Restoration	-3 acres	Grassland and wet meadow habitat restoration	$35,000 {$70,000 total cost)
Alt 10: Beekman Creek Restoration	500 -1,000 feet	Invasive Species management and planting; install 8 vortex weirs	$42,200
Alt. 11: Underhill Preserve Grassland Restoration	22 acres	Grassland restoration	S39,225
Alt. 12: Hempstead Harbor Cove Wetland Restoration	~5 acres	Tidal wetland restoration	$25,000

G. Compliance with the National Environmental Policy Act (NEPA)

The *Final Revised Procedures* for the USFWS for implementing NEPA, published in the *Federal Register* on January 16, 1997 , provide a categorical exclusion for natural resource damage assessment restoration plans prepared under CERCLA when only minor or negligible change in the use of the affected areas is planned. Categorical exclusions are classes of actions that do not individually or cumulatively have a significant effect on the human environment.
The Seatuck National Wildlife Refuge wetland, and invasive species management projects, Theodore Roosevelt Sanctuary coastal forest restoration project, and ExxonMobil site wet

meadow and grassland restoration project will result in only a minor change in the use of the affected areas. Accordingly, this Restoration Plan qualifies for a categorical exclusion under NEPA. Vie have prepared an Environmental Action Statement documenting this determination. That Environmental Action Statement is attached to this Final Restoration Plan as Attachment A.



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U.S. Department of the Interior Approval

of the

Mattiace Petrochemical Compa11y Site

Final Restoration Plan Addendum and

Environmental Assessment

Tn accordance with U.S. Dcpa1tment of the Interior policy regarding documentation for natural resource damage assessment and restoration projects (521 DM 3), the Authorized Official for the Department must demonstrate approval of draft and final Restoration Plans and their associated National Environmental Policy Act documentation, with concurrence from the Department's Office of the Solicitor.

The Autho1ized Official for the Mattiace Petrochemical Company natural resource damage assessment case is the Regional Director for the U.S. Fish and Wildlife Service's Northeast Region.

By the signature below, the Mattiace Petrochemical Company Draft Restoration Plan Addendum and Environmental Assessment is hereby approved.

Approved:		Concurred:	
Wendi Weber	Date	Mark Barash	Date
Regional Director		Senior Attorney	
Northeast Region		Northeast Region	
U.S. Fish and Wildlife Service		Office of the Solicitor	

U.S. Department of the Interior Approval

of the

Mattiace Petrochemical Company Site

Final Restoration Plan Addendum and

Environmental Assessment

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By the signatures below the Maniace Petrochemical Company Final Restoration Plan Addendum and Environ n1entnl Assessment is hereby approved.

Approved:

6/7/13

Regional Director Date

Northeast Region

U.S. Fish and Wildlife Service

Concurred:

Mark Barash Date

Senior Attorney

Northeast Region

Office of the Solicitor