

**FINAL RESTORATION PLAN
AND
ENVIRONMENTAL ASSESSMENT
for the
SUTTON BROOK DISPOSAL AREA
NATURAL RESOURCE DAMAGE SETTLEMENT**

Tewksbury, Massachusetts



March 24, 2023

Prepared by:

Commonwealth of Massachusetts
U.S. Fish and Wildlife Service

Table of Contents

ACRONYMS	iv
EXECUTIVE SUMMARY	v
1. INTRODUCTION.....	1
1.1. Purpose and Need for Restoration	3
1.2. History of the Site.....	3
1.3. Remedial Activities	4
1.4. Injury Assessment	4
1.5. Coordination and Public Participation.....	5
1.6. Trustee Council and Decision Making	5
1.6.1. Administrative Records.....	6
1.7. Restoration Goals and Objectives.....	6
1.8. Restoration Eligibility and Evaluation Criteria	6
1.8.1. Eligibility Criteria Developed by the Trustees.....	6
2. RESTORATION ALTERNATIVES	8
2.1. Alternative 1 (Preferred).....	8
2.2. Alternative 2 (Non-preferred).....	13
2.3. Alternative 3 (Non-preferred).....	14
2.4. Projects Considered but Not Evaluated	15
2.5. Evaluation of Restoration Alternatives.....	15
3. ENVIRONMENTAL AND SOCIOECONOMIC CONSEQUENCES OF RESTORATION ALTERNATIVES.....	15
3.1. Affected Environment	15
3.2. Effects on Physical Resources	16
3.3. Effects on Biological Resources.....	16
3.4. Effects on Historic and Cultural Resources	16
3.5. Effects on Socioeconomic Resources	17
3.6. Cumulative Effects	17
3.7. Conclusion Regarding Environmental and Socioeconomic Consequences of the Alternatives	17
4. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS AND POLICIES	23
5. MONITORING	23
6. CONCLUSION	23
7. LIST OF PREPARERS, AGENCIES AND PERSONS CONSULTED.....	23
8. REFERENCES.....	24
9. APPENDICES.....	25

List of Tables

Table 1. Evaluation of Environmental and Socioeconomic Consequences of Alternative 1: Wetland and Groundwater Restoration at Poplar Street – Option 2.....	19
Table 2. Evaluation of Environmental and Socioeconomic Consequences of Alternative 1: Wetland and Floodplain Restoration at Mollie Drive	20
Table 3. Evaluation of Environmental and Socioeconomic Consequences of Alternative 2: Bayberry Lane Culvert Replacement.....	21
Table 4. Evaluation of Environmental and Socioeconomic Consequences of Alternative 3: No Action	22

List of Figures

Figure 1. Map of Sutton Brook Disposal Area Superfund Site, which shows Sutton Brook bisecting the Site.	3
Figure 2. Poplar Street Site Location (Abt Associates 2021).....	9
Figure 3. Mounded topography and berms indicate an area of historic sand/gravel borrow	10
Figure 4. Mollie Drive Site Location (Abt Associates 2021).....	12
Figure 5. Debris remaining on the site	12
Figure 6. Bayberry Lane Culvert Complex.....	14

List of Appendices

Appendix 1. Consistency and Compliance with State and Federal Laws, Regulations, and Programs	26
Appendix 2. Approval of the Final Restoration Plan and Environmental Assessment.....	28
Appendix 3. National Environmental Policy Act Compliance	31
Appendix 4. Comment on the Draft Restoration Plan and Environmental Assessment	34

ACRONYMS

CE - Categorical Exclusion
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CFR - Code of Federal Regulations
CFR - Code of Federal Regulations
CMR - Code of Massachusetts Regulations
CWA - Clean Water Act
DCR - Department of Conservation & Recreation
DFG - Department of Fish and Game
DFW - Massachusetts Division of Fisheries and Wildlife
DOI - Department of the Interior
EA - Environmental Assessment
EEA - Executive Office of Energy and Environmental Affairs (MassEEA)
EPA - Environmental Protection Agency
ESA - Endangered Species Act
EJ - Environmental Justice
FONSI - Finding of No Significant Impact
M.G.L. - Massachusetts General Laws
MassDEP - Massachusetts Department of Environmental Protection
MEPA - Massachusetts Environmental Policy Act
MESA - Massachusetts Endangered Species Act
NEPA - National Environmental Policy Act
NRHP - National Register of Historic Places
NRDA - Natural Resource Damage Assessment
SHPO - State Historic Preservation Office
USFWS - United States Fish and Wildlife Service

EXECUTIVE SUMMARY

The Sutton Brook Disposal Area Superfund Site (Site) is a 100-acre former landfill located in Tewksbury, Massachusetts. Releases of volatile organic compounds, semi-volatile organic compounds, pesticides, polychlorinated biphenyls, and inorganic elements (e.g., arsenic, mercury, lead, copper, and zinc) from the Site caused injury to groundwater resources, freshwater stream and forested wetland habitats, as well as to the fish and wildlife that rely upon these habitats.

In November 2010, the U.S. District Court of the District of Massachusetts approved a settlement between the Potentially Responsible Parties, the Commonwealth of Massachusetts (Commonwealth), and the United States Department of the Interior (DOI). The approved settlement provides \$1.65 million for past assessment costs, and to plan, oversee and implement projects to restore both ecological (\$825,000) and groundwater resources (\$825,000) that were injured by the release of hazardous substances from the Site. The Trustees (DOI, acting by and through the U.S. Fish and Wildlife Service, and the Massachusetts Executive Office of Energy and Environmental Affairs of the Commonwealth, acting by and through the Massachusetts Department of Environmental Protection) will utilize the combined funds to most effectively and efficiently implement restoration that benefits both ecological and groundwater resources.

The Trustees considered three alternatives for natural resource restoration. The results of the evaluations of these three alternatives are presented in this document:

<i>Alternative 1 (Preferred)</i>	Wetland and Groundwater Restoration at Poplar Street- Option 2 and Wetland and Floodplain Restoration at Mollie Drive
<i>Alternative 2 (Non-Preferred)</i>	Bayberry Lane Culvert Replacement
<i>Alternative 3 (Non-Preferred)</i>	No Action – no restoration projects implemented

The Trustees have selected to implement Alternative 1 to restore injuries to natural resources at the Sutton Brook Site. A total of up to \$1.5 million will be used to implement the two projects. The remaining funds, approximately \$150,000, will be used for reimbursement of past assessment costs, restoration planning, and restoration oversight.

This document also constitutes the Environmental Assessment for the selected restoration of natural resources as defined under the National Environmental Policy Act [42 USC § 4321 et seq.] and addresses the potential impact of preferred restoration actions on the quality of the physical, biological, and cultural environment. The federal Trustee agency has completed the required NEPA analysis and has issued a Finding of No Significant Impact (FONSI), as part of this document (Appendix 3).

The Trustees released a Draft Restoration Plan and Environmental Assessment (Draft RP/EA) for a 45-day public comment period beginning on October 26, 2022. One written comment from the Tewksbury Open Space and Recreation Plan Committee supporting the preferred alternative was received. Some clarifications were incorporated into this Final RP/EA; however, the Trustees did not make any substantive changes to their preferred restoration alternative.

1. INTRODUCTION

The Sutton Brook Disposal Area Superfund Site (Site) is a 100-acre former landfill located in Tewksbury, Massachusetts. Releases of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and inorganic elements (e.g., arsenic, mercury, lead, copper, and zinc) from the Site caused injury to groundwater resources, freshwater stream and forested wetland habitats, as well as to the fish and wildlife that rely upon these habitats.

In November 2010, the U.S. District Court of the District of Massachusetts approved a settlement between the Potentially Responsible Parties (PRPs), the Commonwealth of Massachusetts (Commonwealth), and the United States Department of the Interior (DOI). The approved settlement provides \$1.65 million for past assessment costs, and to plan, oversee and implement projects to restore both ecological (\$825,000) and groundwater resources (\$825,000) that were injured by the release of hazardous substances from the Site. The Trustees (DOI, acting by and through the U.S. Fish and Wildlife Service [USFWS], and the Massachusetts Executive Office of Energy and Environmental Affairs of the Commonwealth, acting by and through the Massachusetts Department of Environmental Protection [MassDEP]) will utilize the combined funds to most effectively and efficiently implement restoration that benefits both ecological and groundwater resources.

The Commonwealth and DOI entered into this settlement under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended, commonly known as Superfund (42 USC § 9601 et seq.) and the Massachusetts Oil and Hazardous Material Release Prevention and Response Act (M.G.L. Chapter 21E). Pursuant to CERCLA, designated Federal and state agencies, federally recognized tribes, and foreign governments act as trustees on behalf of the public to assess injuries and plan for restoration to compensate for those injuries. Trustees assess injuries to natural resources resulting from the release of hazardous substances and bring claims against responsible parties for monetary damages in order to compensate the public by restoring, replacing, or acquiring the equivalent of natural resources that have been injured. This process is known as Natural Resource Damage Assessment and Restoration, or NRDAR.

Under Section 107(f)(1) of CERCLA, natural resource damages that are recovered from responsible parties can only be used to restore, replace, or acquire the equivalent of natural resources injured, destroyed, or lost as a result of the release of hazardous substances. Section 111(i) of CERCLA requires Federal and state trustees to develop a restoration plan, and to provide opportunities for public involvement in the development of the plan.

The National Environmental Policy Act (NEPA; 42 [USC § 4321, et seq.]) and its implementing regulations, 40 CFR Parts 1500–1508, require that Federal agencies fully consider the environmental impacts of their decisions and that such information is made available to the public. Federal Trustees meet this requirement by undertaking an environmental impact review and developing either an environmental impact statement, an environmental assessment when a more streamlined review is appropriate, or a categorical exclusion.

The Natural Resources Trustees published a public notice on the availability of restoration funds and held a public meeting on October 4, 2018, to request ideas for funding restoration projects. Acting in their capacity as Natural Resource Trustees on behalf of the public, the Executive Office of Energy and Environmental Affairs of the Commonwealth, acting by and through the MassDEP and DOI, acting by and through the USFWS, released the Draft Restoration Plan and Environmental Assessment (Draft RP/EA) for a 45-day public comment period, beginning on October 26, 2022. One written comment from the Tewksbury Open Space and Recreation Plan Committee supporting the preferred alternative was received (Appendix 4).

In the Final RP/EA, the Trustees have made some clarifications to the Draft RP/EA; however, there have been no substantive changes to the preferred alternative. The Trustees:

- identify the injuries to be restored through this effort;
- select specific natural resource restoration projects for funding that will best compensate the public for the natural resource injuries caused by releases of hazardous substances from the Site;
- explain why projects were selected and what alternative projects were considered;
- ensure that restoration project selection and implementation comply with Federal, state, and local environmental laws and policies; and
- summarize public involvement in the restoration planning process.

Chapter 1 describes the history of the Site, the NRDAR process, the settlement, public participation, and the criteria used for evaluating restoration projects.

Chapter 2 describes and evaluates the reasonable range of restoration alternatives for the joint ecological and groundwater settlement, including the Trustees' preferred alternative and a no-action alternative premised on natural recovery.

Chapter 3 evaluates the preferred and no-action alternatives within the context of NEPA, which requires all Federal agencies to analyze the effects of their proposed actions on the human environment (including biological, physical, socioeconomic, historical, and cultural resources). The Draft and Final RP/EAs are the mechanisms through which the Federal Trustees are ensuring that proposed projects are compliant with NEPA.

Chapter 4 provides an overview of how the Trustee Council's proposed restoration projects have been or will be evaluated for compliance with a wide range of additional environmental laws and regulations. For some of the specific restoration projects proposed, additional consultation, compliance and permitting under laws such as the Endangered Species Act and the Clean Water Act may be required once specific project engineering and design plans are developed.

Chapter 5 describes monitoring requirements, Chapter 6 identifies the preferred alternative and the amount of funding proposed by the Natural Resources Trustees for each project, Chapter 7 identifies the list of preparers, and Chapter 8 identifies references used to produce this document. Appendix 1 lists relevant laws, regulations, and policies that may apply to the projects; Appendix 2 includes each agency's approval of the Final RP/EA; and Appendix 3 provides the National Environmental Protection Act compliance determination.

1.1. Purpose and Need for Restoration

The purpose of the proposed restoration is to compensate the public for the injuries/losses to the affected natural resources caused by the release of hazardous substances from the Site by restoring, replacing, or acquiring the equivalent of those resources. This action is needed because there were injuries to the public's natural resources due to releases of hazardous substances from the Site, including loss of use and loss in function of the groundwater, riverine ecosystem, and its associated wetlands and floodplains.

1.2. History of the Site

The Site is located primarily within the Town of Tewksbury (Town) near South Street in Middlesex County, Massachusetts (a small portion crosses into the Town of Wilmington). The Site is approximately 100 acres (U.S. Environmental Protection Agency [USEPA 2007]) and is comprised of two main source areas: the landfill lobes (the Northern and Southern Landfill Lobes) which cover approximately 40 acres, and the Former Drum Disposal Area (FDDA). Sutton Brook and its associated freshwater wetlands bisect the two-landfill lobes (Figure 1). The Site is bordered to the north by a former piggery (Krochmal Farm) and a forested area, to the west by residential properties and wetlands, to the south by wetlands, open space, and residences, and to the east by a composting operation, cattle feedlot, forested area, and the Boston and Maine Railroad line.

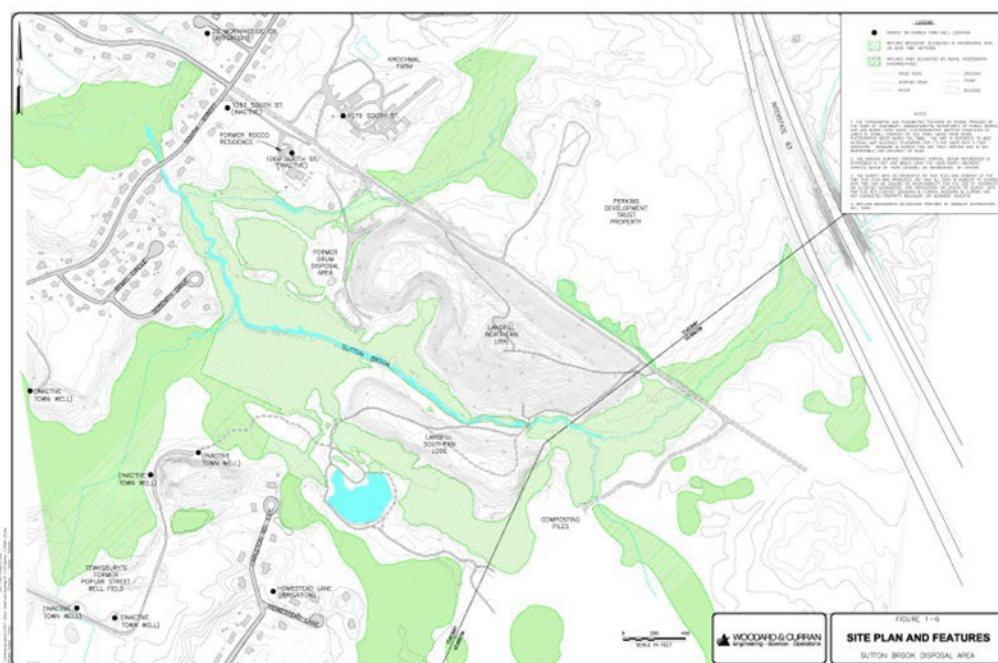


Figure 1. Map of Sutton Brook Disposal Area Superfund Site, which shows Sutton Brook bisecting the Site.

Since at least 1957, the Site was used as a temporary disposal area (Rocco's Disposal Area), but by 1961, it operated as a sanitary landfill, accepting municipal refuse. Later, the landfill accepted commercial and industrial wastes as well as waste from areas outside of Tewksbury. The Commonwealth ordered the closure of the landfill in 1979. Despite this order, landfill operations continued until 1982, and waste was accepted until 1988.

By 1999, MassDEP discovered buried drums and hazardous substances such as toluene, xylene, and phthalates in the surrounding soils and groundwater. Numerous investigations revealed the presence of VOCs, SVOCs, pesticides, PCBs, and inorganic elements (e.g., arsenic, mercury, lead, copper, and zinc) in groundwater, surface water, sediment, soil, as well as VOCs and SVOCs in ambient air (USEPA 2007).

1.3. Remedial Activities

Extensive remedial activities have occurred on the Site, some of which caused additional injury to natural resources. Between 300 and 400 buried drums and approximately 10,000 tons of soil (USEPA 2007) were removed from the Site in 2000. The Site was added to the USEPA National Priorities List in June 2001, and in October 2001, USEPA issued a Unilateral Administrative Order to remove additional soil from the Site. In February 2004, USEPA reached an agreement with 27 PRPs to conduct the Remedial Investigation/Feasibility Study and in 2007, USEPA issued a Record of Decision (ROD), including a selected remedy for the Site.

The remedy included excavation of contaminated soils and sediments above cleanup levels (specifically at the FDDA, former residence, garage and storage area, and between the landfill lobes), consolidation of contaminated material into the landfills with a multi-layer, impermeable cap constructed over each landfill lobe, and a combination of methods for addressing the groundwater contamination (construction of a vertical barrier to intercept groundwater from the southern lobe, collection and treatment of groundwater west of the southern lobe, and monitored natural attenuation).

Remedial activities in wetland areas (e.g., creation of stormwater retention/detention ponds on the eastern side of the Northern Lobe and south side of the Southern Lobe, groundwater treatment at the FDDA) resulted in a permanent loss of approximately 3.3 acres of red maple swamp habitat. There was also a temporary loss of streambed channel habitat during the excavation.

1.4. Injury Assessment

VOCs such as ethyl benzene and toluene were present in surface water and sediments in Sutton Brook that exceeded ecological benchmarks. For toluene, the maximum surface water concentration was over 10 times greater than the benchmark, and the maximum sediment concentration was over 70 times greater. For ethyl benzene, the maximum sediment concentration was nearly 40 times greater than the benchmark. Other VOCs or SVOCs (1,3,5-trimethylbenzene, 3-methylphenol/4-methylphenol, and naphthalene) were present in sediments in concentrations above reference concentrations and 2 to 10 times above benchmarks. Concentrations for metals (e.g., copper) in sediment samples were also elevated above benchmark and reference concentrations in certain locations. Thus, these contaminants have likely adversely affected the growth or viability of benthic invertebrates and aquatic plants, therefore reducing the overall services provided by this habitat. An estimated 4,356 linear feet of stream habitat were injured.

Remedial activities in wetland areas (e.g., creation of stormwater retention/detention ponds on the eastern side of the Northern Lobe and south side of the Southern Lobe, groundwater treatment at the FDDA) resulted in a permanent loss of red maple swamp habitat. Approximately 3.3 acres of forested wetland were permanently lost as a result of remedial activities.

In the groundwater wells located near the Site, VOCs were detected above drinking water standards. Of the VOCs, 1,4 dioxane, tetrahydrofuran, benzene, toluene, xylenes (total), ethylbenzene, methyl isobutyl ketone, methyl ethyl ketone, acetone, 1,1,1-trichloroethane, cis-1,2-dichloroethene, trichloroethene, methylene chloride, tetrachloroethene, carbon tetrachloride, 1,1-dichloroethene, 1,2-dichloroethane, and vinyl chloride exceeded the Massachusetts Maximum Contaminant Levels (MMCLs) for drinking water as well as the Massachusetts Contingency Plan (MCP) Method 1 Standards for groundwater classified as GW-1. Concentrations of SVOCs, including naphthalene and Di(2-ethylethyl)-phthalate, in excess of drinking water MMCLs and Method 1 (GW-1) Standards were also detected in groundwater samples.

1.5. Coordination and Public Participation

Public participation is a key part of the restoration planning process. On July 16, 2018, the Trustees held a meeting with Town officials to explain the NRDAR process and the role of the public in developing a restoration plan. A public meeting was held on October 4, 2018, where the Trustees explained the kinds of projects that the Trustee Council was looking to fund for restoration. The Trustees and the Town conducted several site visits to view possible restoration projects. The Trustees coordinated with the Tewksbury Conservation Commission, Engineering Division, and other Town officials on multiple dates to discuss projects and applicability of local permits required for site evaluations. The Trustees also coordinated with the Massachusetts Division of Ecological Restoration to discuss restoration projects.

The Draft Restoration Plan was released for public review and comment on October 26, 2022 through December 9, 2022. A notice was published in the Tewksbury Town Crier announcing and requesting public comment. The Plan was also emailed to the Town of Tewksbury, who posted it on their website on November 2, and the Shawsheen River Watershed Association. One written comment from the Tewksbury Open Space and Recreation Plan Committee supporting the preferred alternative was received (Appendix 4).

1.6. Trustee Council and Decision Making

The individual Trustees have formed a Trustee Council, which is the decision-making body concerning the use of the restoration settlement funds and works by consensus to make decisions about how the funds will be spent. The Trustee Council has a responsibility and obligation to involve the members of the public and stakeholders in the restoration planning process and has worked actively to do so.

1.6.1. Administrative Records

Records documenting the information considered and actions taken by the Trustees during this restoration planning process comprise the Trustees' administrative record supporting this Final RP/EA. These records are available for review by interested parties who can access or view these records by contacting:

Michelle Craddock
Natural Resource Damages Program Coordinator, MassDEP
100 Cambridge Street, Suite 900
Boston, MA 02114
E-mail: Michelle.L.Craddock@mass.gov

Arrangements must be made in advance to review or to obtain copies of these records. Access to and copying of these records are subject to all applicable laws and policies including, but not limited to, laws and policies relating to copying fees and the reproduction or use of any material that is copyrighted.

1.7. Restoration Goals and Objectives

The goal of this Final RP/EA is to compensate the public for the injuries to the affected natural resources caused by the release of hazardous substances from the Site, including the loss of use and loss in function of groundwater, stream habitat, and forested wetland habitat. The objective of this restoration effort is to implement one or more natural resource restoration projects that will restore groundwater, stream, floodplain, and wetland habitats.

1.8. Restoration Eligibility and Evaluation Criteria

CERCLA requires that restoration activities restore, rehabilitate, replace, or acquire the equivalent of the resources and services that were injured or lost; however, the natural resource Trustees have discretion in identifying and selecting preferred restoration projects. The DOI NRDAR regulations set forth factors to be considered in the evaluation and selection of preferred restoration projects (43 CFR 11.82). With these factors as a guide, the Trustees developed Eligibility Criteria to determine if projects met minimum standards for acceptability. Projects that met these Eligibility Criteria were then evaluated against the project evaluation criteria, using a qualitative assessment of project strengths for each criterion.

1.8.1. Eligibility Criteria Developed by the Trustees

Projects must have met the following Eligibility Criteria in order to be further considered and evaluated by the Trustees using the Evaluation Criteria. If any project did not meet the Eligibility Criteria, it was not given further consideration by the Trustees. A project's demonstrated consistency with the Eligibility Criteria does not guarantee that it will be funded, but merely establishes that the Trustees may consider the project for possible funding. Conversely, rejection of a proposed project based on these criteria means that the Trustees will not allocate NRDAR funds for that project, even though the proposed project may yield a restoration benefit to injured natural resources.

The project Eligibility Criteria were as follows:

A proposed project was not to be considered eligible for Trustee consideration unless it:

- restored, rehabilitated, replaced and/or acquired the equivalent of natural resources and/or natural resource services that were injured by the release of hazardous substances from the Site;
- was located in or benefits resources in the Shawsheen River watershed;
- was protective of health and safety; and
- was consistent with Federal, state, or local laws, regulations, or policies.

A proposed project was not considered eligible for Trustee consideration if it:

- included an action or actions that are presently required under other Federal, state, or local law;
- restored natural resources and/or services solely outside of the Shawsheen River watershed; or
- interfered with or would be undone or negatively affected by remedial work by USEPA or pursuant to M.G.L. Chapter 21E.

The Trustee Council was solely responsible for determining whether proposed restoration project ideas met these criteria

1.8.2. Evaluation Criteria

The DOI NRDAR regulations identify factors to be considered in the evaluation and selection of preferred alternatives (43 CFR 11.82):

- Technical feasibility
- The relationship of the expected costs of the proposed actions to the expected benefits from the restoration, rehabilitation, replacement, and/or acquisition of equivalent resources
- Cost-effectiveness
- Results of any actual or planned response actions
- Potential for additional injury resulting from the proposed actions, including long-term and indirect impacts to the injured resources or other resources
- Natural recovery period
- Ability of the resources to recover with or without alternative actions
- Potential effects of the action on human health and safety
- Consistency with relevant Federal, state, and tribal policies
- Compliance with applicable Federal, state, and tribal laws

The Sutton Brook Trustee Council incorporated the 10 factors described above into its Evaluation Criteria. The Trustee Council used the Evaluation Criteria to prioritize eligible restoration projects through a qualitative assessment of their value and feasibility.

2. RESTORATION ALTERNATIVES

As stated previously, DOI and the Commonwealth received \$825,000 for the restoration of ecological resources and the Commonwealth received \$825,000 for injuries specifically to groundwater resources. The Trustees decided to combine the funds to implement restoration projects that will benefit both ecological and groundwater resources. Past assessment costs and restoration planning has used \$138,000 of the ecological resources settlement to date, leaving \$1,512,000 for restoration implementation.

After considering eligibility and key evaluation criteria such as technical feasibility, likelihood of success, cost- effectiveness, ability to leverage additional funds, and proximity to the Sutton Brook Site, the Trustee Council determined that it would explore and analyze in detail three alternatives:

<i>Alternative 1 (Preferred)</i>	Poplar Street Wetland and Groundwater Restoration Project (Option 2) Mollie Drive Wetland and Floodplain Restoration Project
<i>Alternative 2 (Non-Preferred)</i>	Bayberry Lane Culvert Replacement
<i>Alternative 3 (Non-Preferred)</i>	No Action – no restoration projects implemented

2.1. Alternative 1 (Preferred)

The Trustees' preferred alternative is to partner with the Town of Tewksbury to implement two wetland restoration projects located in Tewksbury: Poplar Street Wetland and Groundwater Restoration Project and Mollie Drive Wetland and Floodplain Restoration Project. The feasibility of the projects was evaluated, in part, through a contract with Abt Associates (Abt Associates 2021).

<i>PARTNER</i>	<i>PROJECT</i>	<i>PROPOSED FUNDING</i>
Town of Tewksbury	<i>Poplar Street Wetland & Groundwater Restoration Project (Option 2)</i>	\$1,300,000
Town of Tewksbury	<i>Mollie Drive Wetland and Floodplain Restoration Project</i>	\$200,000
<i>TOTAL:</i>		\$1,500,000

Poplar Street Wetland and Groundwater Restoration Project

The Poplar Street Wetland and Groundwater Restoration Project (Poplar Street Project) is situated within an approximately 79-acre parcel (Figure 2). The property is the location of the now defunct Tewksbury South Street Wellfields, which have been abandoned for several decades. The original wells, pump houses and other infrastructure remain on the site. The Town has indicated that they have no expectation of using the wells again in the future.

The site is accessed at the end of Poplar Street, which is gated at the entrance to the property. Approximately 700 feet into the site, the paved access road takes a 90-degree turn to the north, at which point it transitions to a dirt path maintained only for emergency access. Both branches of the road cut through and bisect areas of wooded shrub swamp. Further to the north and east, there is an extensive permanently flooded emergent wetland. Natural surface and groundwater flow across the site is from the direction of built-up residential areas to the south and west toward this large wetland complex to the north and east.

The entire site is located within the FEMA-designated 100-year floodplain. A single culvert is now the only connection between the south side and north side of Poplar Street. The 30-inch culvert is further constricted by an 18-inch sewer pipe that runs through the culvert. There are no surface hydrologic connections between the east and west sides of the wetland complex where it is bisected by the north leg of the road.

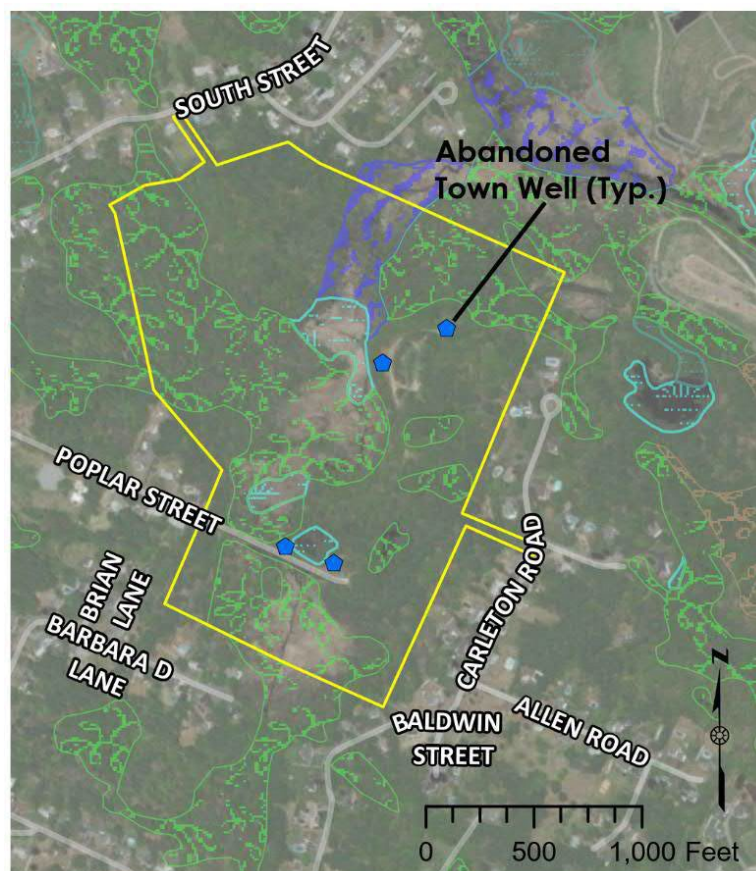


Figure 2. Poplar Street Site Location (Abt Associates 2021)

In addition to fill associated with the road prism, significant historic earth movement and placement of fill has occurred on the site. According to Town staff, in addition to receiving fill, portions of the site may have been a source of borrow and/or sand/gravel extraction in the past (Figure 3). A series of disconnected, linear berms of up to approximately 6 to 8 feet in height are now situated west of the dirt road, parallel to the edge of the emergent wetland. Significant time has passed since the establishment of these berms, as evidenced by the maturity of the trees that exist on them.

The Poplar Street Project offers significant opportunity to expand the size and quality of an existing wetland complex. The primary objectives of a restoration project at this site include: 1) removal of fill placed in historic wetlands and restoration of habitat functions and values associated with this resource area, including increased groundwater recharge; 2) increasing flood storage capacity via removal of fill from the 100-year floodplain; 3) ecological enhancement of upland habitat; 4) management of invasive species; and 5) improvement of a Town conservation property for increased passive recreation use.

The proposed restoration at Poplar Street entails four primary components: 1) restoration of buried wetlands; 2) restoration of historic site topography, including in upland areas; 3) re-establishing hydrologic connectivity between wetlands on the east and west sides of the dirt road; and 4) development of passive recreation opportunities for walking/hiking, birding, and other activities. Two options were identified in the feasibility report (Abt Associates 2021): Option 1 maximizes potential benefits on site and would restore approximately 3.7 acres of wetland habitat; and Option 2 would restore 2.7 acres of wetland habitat but is more cost-effective and faces fewer design challenges.



Figure 3. Mounded topography and berms indicate an area of historic sand/gravel borrow

Of the two potential restoration options at the site, Option 2 is the Trustees' preferred alternative. It will restore approximately 2.7 acres of buried wetlands and increase flood storage capacity through removal of approximately 17,200 cubic yards of fill from the 100-year floodplain. The project is technically feasible; the estimated cost of \$481,000 per wetland acre restored is reasonable when compared to other wetland restoration cost estimates, such as that developed by the Massachusetts In-Lieu Fee Program. The project will comply with relevant Federal and state policies and laws. Removal of materials from this site will encourage infiltration, promoting groundwater recharge and filtration of pollutants.

Mollie Drive Wetland and Floodplain Restoration Project

The Mollie Drive Restoration Project is located on Town-owned conservation land on an approximately 5-acre parcel that stretches from behind the Knights of Columbus building, located on Main Street/Route 38, to just beyond the cul-de-sac at the end of Mollie Drive (Figure 4). The site is bordered to the north by the Shawsheen River, with a narrow strip of privately owned land lying between the Town-owned parcel and the river along much of the north edge of the property.

The project is limited to the northwest quadrant of the property. At this location, the Shawsheen River meanders through extensive emergent wetlands immediately to the north of the site; the Mollie Drive site itself consists of floodplain that transitions abruptly to wooded uplands.

Debris and historic fill are evident at the site surface and scattered across the property (Figure 5). Much of this debris was characterized and mapped during an environmental assessment which the Trustees conducted in 2019 (Watermark 2019). Subsequent remediation work was conducted by the Town in 2020 and 2021 to remove contaminated soil from an area of the site adjacent to the River where a pile of railroad ties had been disposed of. Remaining debris consists largely of metal and concrete materials scattered around the site, along with piles of fill material, which have dramatically altered the topographic character of the site.

Fill material appears to have been brought into the site from the west, deposited approximately half-way into the site, and pushed into several consolidated piles at the wetland edge toward the north. These piles are within the FEMA-designated 100-year floodplain and were also presumed to have filled in areas of bordering vegetated wetlands. Review of historic aerial imagery and mapping showed a structure formerly on the site. The building is estimated to have been approximately 30 feet by 40 feet.

The Mollie Drive site is immediately adjacent to the Shawsheen River and within the floodplain associated with the River. The primary objectives of the restoration project at this site include: 1) removal of fill placed in historic wetlands and restoration of habitat functions and values associated with this resource area; 2) increased flood storage capacity via removal of fill from the 100-year floodplain; 3) clearing of debris from a Town conservation property so that the land can be utilized for passive recreation without risk of injury and with improved aesthetics; and 4) restoration of the area where remediation work was conducted in 2020.

Restoration at Mollie Drive entails two primary components: 1) removal of fill piles and scattered debris; and 2) restoration of buried wetlands. Once these components have been completed, further development of a trail network, canoe/kayak launch, or other amenities to increase passive restoration on the site could be implemented by, or in conjunction with, the Town.

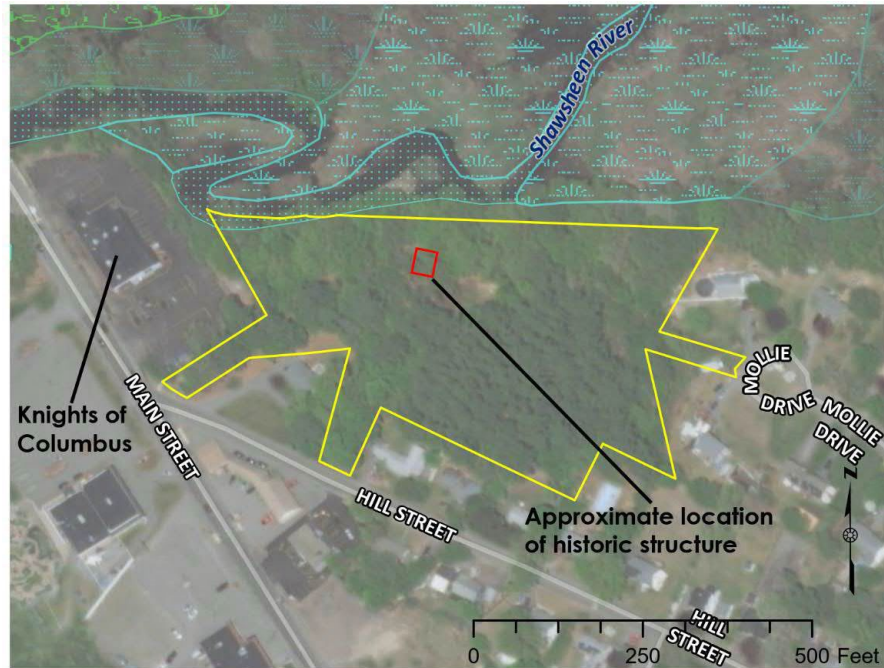


Figure 4. Mollie Drive Site Location (Abt Associates 2021)



Figure 5. Debris remaining on the site

The primary benefit expected from a restoration project at this location is restoration of floodplain storage capacity that has been lost due to the placement of fill. Restoration of a small amount of wetlands (3,800 square feet) on the site will also provide additional benefits in terms of habitat, food provision, and water quality, although it will not provide significant additional habitat connectivity. Removal of materials from this site may encourage infiltration, promoting groundwater recharge and filtration of pollutants. Restoration at the site has social value, particularly for improving passive recreation access. The project is technically feasible, the cost is reasonable when compared to other projects of this type, and it would be likely be compliant with relevant Federal and state policies and laws.

2.2. Alternative 2 (Non-preferred)

<i>PARTNER</i>	<i>PROJECT</i>	<i>PROPOSED FUNDING</i>
Town of Tewksbury	<i>Bayberry Lane Culvert Replacement</i>	\$800,000

Bayberry Lane is a cul-de-sac in Tewksbury that is approximately 800 feet long and crosses Heath Brook approximately 200 feet before the end of the road. The crossing consists of a large concrete headwall, approximately 12 feet high, with four round corrugated metal pipes embedded in the headwall. Each of the pipes was originally 3 feet in diameter; however, all four pipes are severely silted in and crushed, which significantly diminishes their flow capacity. Two of the four pipes are completely blocked and/or crushed and allow essentially no flow through the structures. As such, the crossing is functioning more like a dam with small drains rather than as a proper stream conveyance (Figure 6).

Using data from the stream crossing survey and available GIS data, the crossing was assessed for vulnerability to flooding and associated impacts relative to hydraulic capacity, structural condition, geomorphic conditions, aquatic organism passage, transportation services, land use, and climate change considerations. The two blocked structures provide little if any aquatic passage; however, passage is possible through the remaining two pipes. The crossing was assigned a moderately high rating for potential to improve ecological integrity. However, in combination with the rating for aquatic passage, the crossing received a relatively low score for overall aquatic passage benefits that would accrue from improved passability at the crossing.

Given that replacement of this crossing location is not expected to have particularly high value for improving aquatic passage, the primary objectives of a restoration project at this location would be to: 1) improve the hydraulic passability of the structure to enhance the resilience of the stream crossing and stream system by replacing the existing crossing with one that will withstand extreme flood events, and provide for the passage of both water and debris during floods; 2) reduce the risk of failure associated with the existing major structural deficiencies of the crossing; 3) re-naturalize and improve the habitat quality of the stream corridor, particularly downstream of the crossing; 4) restore the stream channel where sediment deposits have accumulated; and 5) improve terrestrial passage within the stream corridor.

The project is technically feasible; the cost is comparable to other culvert replacement projects in Massachusetts, and it would likely be compliant with relevant Federal and state policies and laws; however, it is not as cost-effective as Alternative 1, and it does not restore as much wetland habitat as Alternative 1. The primary benefit of Alternative 2 is improved infrastructure by enhancing resilience of the stream crossing.



Figure 6. Bayberry Lane Culvert Complex

2.3. Alternative 3 (Non-preferred)

In developing restoration plans for natural resource damage settlements, Trustee Councils are required to evaluate a “no action” alternative. Under the no action alternative, the Trustees would undertake no restoration projects and any further restoration of natural resources and services injured by the release of hazardous substances from the Site would instead occur through natural recovery alone. No actions to assist with the recovery and restoration of natural resources would be taken beyond those remedial actions that have occurred on-site to remove contaminants. The “no action” alternative is not compliant with relevant Federal and state policies and laws since it would not utilize settlement monies for restoration and does not provide benefits to injured natural resources, which is the intended use of such funds under CERCLA. Thus, the “no action” alternative serves as a point of comparison to the preferred alternative.

2.4. Projects Considered but Not Evaluated

Several other projects were considered for potential restoration. They include the Pinnacle Brook Culvert Replacement, Bridge Street Culvert Replacement, and the Ballardville Dam Removal. The Pinnacle Brook Culvert Replacement project found alternative funding and was implemented. The Ballardville Dam Removal and Bridge Street Culvert Replacement both had significant issues with the evaluation criteria (including cost-effectiveness and technical feasibility) that precluded them from more in-depth evaluation.

2.5. Evaluation of Restoration Alternatives

In evaluating the restoration alternatives using the criteria in Section 1.8.2, Alternative 1 provides the largest benefits to ecological and groundwater resources. The restoration is technically feasible, cost-effective, the benefits are commensurate with the expected costs, it is likely consistent with all relevant Federal and state policies and laws, and the short-term negative effects during construction will be far outweighed by the long-term ecological benefits. The wetland, groundwater, and floodplain restoration proposed by Alternative 1 most closely restores the ecological injury from the Site.

3. ENVIRONMENTAL AND SOCIOECONOMIC CONSEQUENCES OF RESTORATION ALTERNATIVES

Actions undertaken by Federal trustees to restore natural resources or services under CERCLA, and other Federal laws are subject to NEPA, 42 U.S.C. § 4321, et seq., and the regulations at 40 C.F.R. Parts 1500 through 1508. NEPA and its implementing regulations outline the responsibilities of Federal agencies. In general, Federal agencies contemplating implementation of a major Federal action must produce an Environmental Impact Statement (EIS) if the action is expected to have significant impacts on the quality of the human environment. When it is uncertain whether the proposed action is likely to have significant impacts, Federal agencies prepare an Environmental Assessment (EA) to evaluate the need for an EIS. In the Draft and Final RP/EAs, the Trustees demonstrated that the proposed action will not significantly impact the quality of the human environment, and in the Final RP/EA the Federal agencies have issued a Finding of No Significant Impact (FONSI), see Appendix 3, which satisfies the requirements of NEPA, and no EIS is required.

3.1. Affected Environment

The Shawsheen River is a 26.7-mile-long tributary of the Merrimack River in northeast Massachusetts. The headwaters of the Shawsheen originate at Hanscom Field in Bedford and flow north. The Shawsheen runs through the towns of Bedford, Billerica, Wilmington, Tewksbury, Andover, and Lawrence. It has a total drainage area of approximately 78 square miles and includes approximately 60 miles of named rivers and streams. The watershed supports a population of approximately 250,000 people.

MassDEP compiled a Water Quality Assessment Report for the River in 2000 (<https://www.mass.gov/doc/shawsheen-river-watershed-2000-water-quality-assessment-report-0/download>, accessed March 2022). The Aquatic Life Use (ALU) is supported when suitable habitat (including water quality) is available for sustaining a native, naturally diverse, community of aquatic flora and fauna. Eleven percent of the river area in the watershed was impaired, while the remaining 89 percent was supported or not assessed. The Primary Contact Recreational Use is supported when conditions are suitable for any recreational or other water related activity during which there is prolonged and intimate contact with the water and there exists a significant risk of ingestion. Fifty-three percent of the river area in the watershed was impaired, 41 percent was supported, and 6 percent was not assessed.

The Shawsheen has played an important role in the development of the area, including industrial development, with many mills built to take advantage of its power. Today there are trails and parks located along several sections of the river, and preservation efforts are carried out by the Shawsheen River Watershed Association and the towns along the river.

3.2. Effects on Physical Resources

The Trustees expect that the proposed restoration alternatives, with the exception of the no action alternative, will have an overall beneficial effect on physical resources. Alternative 1 (preferred) will result in improvements to wetland habitats. Alternative 2 would restore and improve the river channel and instream habitat. Alternative 3 (no action) would have no effect on physical resources. The Trustees expect short-term, adverse effects to the physical environment (e.g., temporary decreases in water quality and wildlife/fisheries disturbance during construction activity) as a result of implementing either Alternative 1 (preferred) or Alternative 2. These effects are expected to be short-term and insignificant.

3.3. Effects on Biological Resources

The Trustees expect that the proposed restoration alternatives, with the exception of the no action alternative, will have a beneficial effect on biological resources. Alternative 1 (preferred) will result in benefits to benthic macroinvertebrates, fish, birds, and mammals that will utilize the restored wetland habitats. Alternative 2 would also benefit benthic macroinvertebrates and fish. The Trustees expect short-term adverse effects to biological resources as a result of implementing either Alternative 1 (preferred) or Alternative 2, such as temporary loss of vegetation during construction, some mortality of non-motile organisms and temporary displacement of motile organisms. These effects are expected to be short-term and insignificant. Alternative 3 (no action) would have no effect on biological resources.

3.4. Effects on Historic and Cultural Resources

There are no anticipated adverse effects to historic and cultural resources related to the proposed restoration activities in Alternatives 1 or 2. Consultation will be conducted with Tribal Historic Preservation Officers and the Massachusetts Historical Commission under Section 106 of the National Historic Preservation Act during project design to further assess and evaluate any potential effects. The Trustees will adjust project designs to minimize effects on any historical or cultural resources, if necessary. Alternative 3 (no action) would have no effect on historic and cultural resources.

3.5. Effects on Socioeconomic Resources

There are no significant adverse long-term socioeconomic effects associated with Alternative 1 (preferred). Some short-term disruption of traffic and/or increase in noise may be associated with construction equipment during project implementation. Alternative 1 is expected to provide long-term beneficial socioeconomic effects such as increased passive recreational opportunities for residents within the watershed. Alternative 2 would have a short-term significant effect on local residents of Bayberry Lane due to the partial closing of the road during construction. Alternative 3 (no action) would have no beneficial effects on socioeconomic resources and could potentially have an insignificant adverse effect on socioeconomic resources because the Trustees would not be providing funding to local municipalities and nongovernmental organizations located in the watershed to conduct restoration projects.

3.6. Cumulative Effects

Cumulatively, it is anticipated that there will be a long-term, positive effect on the biological and physical health of the Shawsheen River watershed due to the implementation of Alternative 1 (preferred) projects. However, relative to the magnitude of adverse ecological impacts that currently exist in the watershed, the positive cumulative effect of these proposed restoration actions is not expected to be significant.

Cumulatively, it is anticipated that there would be a long-term, positive effect on the biological and physical health of the Upper Shawsheen River watershed due to the implementation of Alternative 2 (non-preferred). However, relative to the magnitude of adverse ecological impacts that currently exist in the watershed, the positive cumulative effect of this restoration project is not expected to be significant.

Cumulatively, it is anticipated that there would be a long-term adverse effect to the physical health of the Shawsheen River watershed were Alternative 3 (no action) selected because no restoration would occur. However, relative to the magnitude of adverse ecological impacts that currently exist in the watershed, the adverse cumulative effect of the no action alternative is not expected to be significant.

3.7. Conclusion Regarding Environmental and Socioeconomic Consequences of the Alternatives

The Trustees' preferred restoration project (Alternative 1) is not expected to cause any significant long-term adverse effects to physical, biological, socioeconomic, historic and/or cultural resources. The project is expected to have a long-term, beneficial effect on physical, biological, and socioeconomic resources in the watershed. Some insignificant, adverse, short-term, direct, and indirect ecological effects are expected during the implementation of Alternative 1 (Table 1 and Table 2). Alternative 2, Bayberry Lane Culvert Replacement, would have limited beneficial effects on physical, biological, and socioeconomic resources in the watershed (Table 3), as well as some insignificant, adverse, short-term, direct, and indirect ecological effects. Alternative 3, the no action alternative, would have no beneficial effects on the environment (Table 4). Under this alternative, the negative impacts to ecological and groundwater resources caused by the release of hazardous substances from the Sutton Brook Site would not be countered by the positive effects of restoration projects in the vicinity of the Site.

Within the context of NEPA, the Federal Trustee has determined both Alternative 1 and Alternative 2 would have a beneficial effect on physical and biological resources. However, Alternative 1, which includes wetland and floodplain restoration at Mollie Drive and wetland restoration at Poplar Street, would have a greater beneficial effect than Alternative 2. Thus, the Trustees have selected Alternative 1 as the preferred restoration option.

Through this Final RP/EA, the federal Trustee agency has completed the required NEPA analysis and has issued a Finding of No Significant Impact (Appendix 3).

Table 1. Evaluation of Environmental and Socioeconomic Consequences of Alternative 1: Wetland and Groundwater Restoration at Poplar Street – Option 2

Adverse/ Beneficial	Effect	Affected Resources	Long/ Short Term	Indirect /Direct	Significant/Insignificant
Beneficial	Reduce flooding	Physical	Long	Direct	Significant - Will increase flood storage capacity (8.7 acre-feet) via removal of fill (14,000 cubic yards) from the 100-year floodplain.
Beneficial	Wetland habitat restoration	Biological, Physical	Long	Direct	Significant - approximately 2.7 acres of buried wetlands will be restored. Restoration of wetlands will increase groundwater recharge.
Beneficial	Upland habitat enhancement	Biological, Physical	Long	Direct	Insignificant - The primary habitat type for this project will be wetlands but restoration of historic site topography will improve upland areas.
Beneficial	Re-establishing hydrologic connectivity between wetlands	Biological, Physical	Long	Direct	Significant - Restoration of historic hydrologic connections are proposed at three locations on the site. Reconnection of distinct wetlands into a single wetland complex via new hydrologic connections between the wetlands will increase habitat connectivity and facilitate exchange between the wetlands. Improved habitat and habitat connectivity at this location will have benefits for both wetland and upland systems.
Beneficial	Development of a trail network	Socioeconomic, cultural	Long	Direct	Insignificant - Passive recreation is not a primary objective of the project but can be incorporated as funding allows.
Adverse	Traffic disruption due to construction equipment on roads near project sites	Socioeconomic	Short	Indirect	Insignificant – Temporary condition; measures will be taken to reduce congestion as much as possible; no significant effects to local businesses or residents are anticipated.
Adverse	Increased noise for neighbors and passersby	Socioeconomic	Short	Direct	Insignificant- Temporary condition - construction is expected to take one year
Adverse	Mortality of non-motile aquatic organisms	Biological	Short	Direct	Insignificant – Some aquatic organisms that are not able to move out of the way of construction equipment may die during construction.
Adverse	Clearing of herbaceous and woody vegetation	Biological	Short	Direct	Insignificant – Areas are expected to revegetate quickly; they will be replanted/reseeded with native vegetation.

Table 2. Evaluation of Environmental and Socioeconomic Consequences of Alternative 1: Wetland and Floodplain Restoration at Mollie Drive

Adverse/Beneficial	Effect	Affected Resources	Long/Short Term	Indirect/Direct	Significant/Insignificant
Beneficial	Reduce flooding	Physical	Long	Direct	Insignificant - Will increase flood storage capacity (0.3 acre-feet) via removal of fill (503 cubic yards) from the 100-year floodplain.
Beneficial	Wetland habitat restoration	Biological, Physical	Long	Direct	Insignificant - the wetland restoration area is expected to be limited to approximately 3,800 square feet
Beneficial	Development of a trail network, canoe/kayak launch	Socioeconomic, cultural	Long	Direct	Insignificant - Passive recreation is not a primary objective of the project but can be incorporated as funding allows.
Adverse	Increased turbidity in adjacent stream water during construction leading to reduction in water quality	Physical	Short	Direct	Insignificant –Temporary condition; State-mandated erosion control protocols will be followed to minimize turbidity and erosion on site. Construction will follow Clean Water Act permit requirements, thus minimizing impacts to water quality.
Adverse	Traffic disruption due to construction equipment on roads near project sites	Socioeconomic	Short	Indirect	Insignificant –Temporary condition; measures will be taken to reduce congestion as much as possible; no significant effects to local businesses or residents are anticipated.
Adverse	Increased noise for neighbors and passersby	Socioeconomic	Short	Direct	Insignificant - Temporary condition - construction is expected to take one year
Adverse	Mortality of non-motile aquatic organisms	Biological	Short	Direct	Insignificant – Some aquatic organisms that are not able to move out of the way of construction equipment may die during construction.

Table 3. Evaluation of Environmental and Socioeconomic Consequences of Alternative 2: Bayberry Lane Culvert Replacement

Adverse/ Beneficial	Effect	Affected Resources	Long/Short Term	Indirect/ Direct	Significant/Insignificant
Beneficial	Improve hydraulic passability to enhance the resilience of the stream crossing	Physical	Long	Direct	Significant -Improving hydraulic capacity will allow for passage of flows and debris associated with varying size storm events and will reduce flooding
Beneficial	Improve migratory fish passage	Biological	Long	Direct	Insignificant - existing structure does not pose a significant barrier to fish passage.
Beneficial	Re-naturalize and improve habitat quality of the stream corridor	Biological, Physical	Long	Direct	Insignificant - There is potential to increase bank stability and improve a limited amount of riparian habitat along the downstream reach
Beneficial	Improve terrestrial passage within the stream corridor	Biological, Physical	Long	Direct	Insignificant - Installation of an open-bottom arch would provide dry passage for terrestrial species along banks built within the structure. Removal of one barrier within the watershed is not expected to be significant within the context of NEPA.
Adverse	Traffic disruption due to construction equipment on roads near project sites	Socioeconomic	Short	Indirect	Insignificant –Temporary condition; measures will be taken to reduce congestion as much as possible; no significant effects to local businesses or residents are anticipated.
Adverse	Increased noise for neighbors and passersby	Socioeconomic	Short	Direct	Insignificant- Temporary condition - construction is expected to take one year
Adverse	Mortality of non-motile aquatic organisms	Biological	Short	Direct	Insignificant – Some aquatic organisms that are not able to move out of the way of construction equipment may die during construction.
Adverse	Increased turbidity during construction leading to reduction in water quality	Physical	Short	Direct	Insignificant –Temporary condition; State-mandated erosion control protocols will be followed to minimize turbidity and erosion on site. Construction will follow Clean Water Act permit requirements, thus minimizing impacts to water quality.

Table 4. Evaluation of Environmental and Socioeconomic Consequences of Alternative 3: No Action

Adverse/Beneficial	Effect	Affected Resources	Long/Short Term	Indirect/Direct	Significant/Insignificant
Adverse	No compensation for past and interim natural resource services	Socioeconomic	Long	Direct	Significant – Long-term loss of natural resources services to the community and noncompliance with Federal and state policies and laws

4. COMPLIANCE WITH FEDERAL, STATE AND LOCAL LAWS AND POLICIES

The proposed restoration projects either have or will be evaluated for consistency with applicable Federal, State, and local laws, regulations, and programs (Appendix 1). All project sponsors that receive NRDAR funding will be responsible for obtaining necessary permits and complying with relevant local, state, and federal laws, policies, and ordinances.

5. MONITORING

A Monitoring Plan will be a requirement in the design plans of Alternative 1. In addition to oversight during the actual construction, data will be collected to document habitat recovery and wildlife use in subsequent years to advise the Town on adaptive management techniques to improve the overall success of the project. Some of these techniques could include invasive species control, supplemental plantings, and trail maintenance and expansion.

6. CONCLUSION

After significant and meaningful consultation with the public, stakeholders, and restoration project proponents, and after evaluating and considering the proposed restoration alternatives under CERCLA and NEPA, the Trustees have selected Alternative 1: Poplar Street Wetland Restoration Project - Option 2 and Mollie Drive Wetland and Floodplain Restoration Project as their preferred restoration alternative. Funds are anticipated to be distributed as follows:

Partner	Project	Proposed Funding
Town of Tewksbury	Alternative 1 - Poplar Street Wetland Restoration Project – Option 2	Up to \$1,300,000
Town of Tewksbury	Alternative 1 - Mollie Drive Wetland and Floodplain Restoration Project	Up to \$200,000

Some additional funding may be necessary to support Trustee oversight and monitoring; thus, proposed funding amounts are estimated.

7. LIST OF PREPARERS, AGENCIES AND PERSONS CONSULTED

Mark Barash, U.S. Fish and Wildlife Service
Andrew Major, U.S. Fish and Wildlife Service
Molly Sperduto, U.S. Fish and Wildlife Service
Stephen Johnson, Massachusetts Department of Environmental Protection
Michelle Craddock, Massachusetts Department of Environmental Protection

8. REFERENCES

Abt Associates. 2021. Natural Resource Damages Restoration Projects Analysis Report, Sutton Brook Site, Tewksbury, MA. 44 pp.

United States Environmental Protection Agency. 2007. Record of Decision Sutton Brook Disposal Area Superfund Site, Tewksbury, MA. 297 pp.

Watermark. 2019. ASTM Phase II Environmental Site Assessment Report: Sutton Brook NRD/Mollie Drive Site, Tewksbury, MA. 64 pp.

9. APPENDICES

Appendix I. Consistency and Compliance with State and Federal Laws, Regulations, and Programs

Law, Regulation or Program	Compliance Description
National Environmental Policy Act (NEPA)	The Draft and Final RP/EAs have been developed in compliance with NEPA by the Federal Trustee.
Comprehensive Environmental Response Compensation and Liability Act (CERCLA)	The Draft and Final RP/EA have been developed in compliance with CERCLA
Watershed Protection and Flood Prevention Act	The proposed alternative is expected to assist in the reduction of erosion, floodwater, and sediment impacts.
Clean Water Act of 1977	To comply with this Act, any necessary applications for 404 General Permits will be filed with the U.S. Army Corps of Engineers.
Endangered Species Act of 1973, as Amended (16 USC 1531 et seq.)	Potential impacts to State- and federally protected species will be evaluated and minimized during the design phase of the proposed projects; projects will enhance fish and wildlife habitat value. Consultations with the USFWS will be conducted in accordance with this Act.
Rivers and Harbors Act of 1899	Any necessary applications for General Permits to the U.S. Army Corps of Engineers will be filed in compliance with this Act.
Presidential Executive Order 12898 – Environmental Justice	The proposed projects will enhance safety and recreational opportunities for all residents and visitors, regardless of ethnic background. Public meetings and comments are open to the public.
Fish and Wildlife Coordination Act	The USFWS is a Lead Federal Agency for the projects proposed and has played an integral role in the development of the proposed projects and alternatives analysis.
Presidential Executive Order 11990 – Protection of Wetlands	The proposed projects avoid, to the extent possible, the long- and short-term adverse impacts associated with the alteration of wetlands.
Presidential Executive Order 11988 – Floodplain Management	The proposed projects will not encourage any human development or building within the existing mapped floodplain.
National Historic Preservation Act of 1966 as amended (16 USC 470 et seq.)	The USFWS will consult with the State Historic Preservation Office and the Advisory Council for Historic Preservation on any projects that could involve historic and/or cultural resources. Project designs may be modified based upon these consultations, if necessary.
Water Resources Development Act of 1990	The proposed projects seek to increase acreage and enhance the quality of wetland resources.

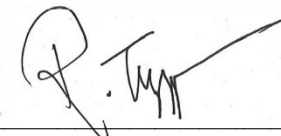
Federal Noxious Weed Control Act and Executive Order 13112	The proposed projects are not expected to introduce or spread noxious weeds or non-native invasive species.
Massachusetts Clean Waters Act (M.G.L. Chapter 21, Sections 26-53)	Authorizes MassDEP to take all action necessary or appropriate to secure to the Commonwealth the benefits of the Federal Water Pollution Control Act, as amended, and other Federal legislation pertaining to water pollution control.
Massachusetts Wetlands Protection Act (M.G.L. Chapter 131 Section 40)	Establishes a public review and decision-making process by which activities affecting Areas Subject to Protection are to be regulated in order to contribute to the following interests: • protection of public and private water supply • protection of ground water supply • flood control • storm damage prevention • prevention of pollution • protection of land containing shellfish • protection of fisheries • protection of wildlife habitat
Massachusetts Area of Critical Environmental Concern (M.G.L. Chapter 21A, Section 2(7))	ACECs are those areas within the Commonwealth where unique clusters of natural and human resource values exist, and which are worthy of a high level of concern and protection. ACEC designation creates a framework for local and regional stewardship of critical resources and ecosystems. After designation, the aim is to preserve and restore these areas and all EEA agencies are directed to take actions with this in mind.
Massachusetts Environmental Policy Act (M.G.L. Chapter 30, Sections 61-62H)	MEPA requires State agencies to study the environmental consequences of their actions. Individual restoration projects may be determined to trigger thresholds established under MEPA and may be required to proceed through a MEPA review.
Massachusetts Endangered Species Act (M.G.L c.131A)	MESA protects rare species and their habitats by prohibiting the “take” of any plant or animal species listed as endangered, threatened, or special concern.
Massachusetts Oil and Hazardous Materials Release Prevention & Response Act, M.G.L. Chapter 21E, as amended.	Authorizes MassDEP to assess injury, recover damages, and restore natural resources.

Appendix 2. Approval of the Final Restoration Plan and Environmental Assessment

Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
Approval of the Final Restoration Plan and Environmental
Assessment for the Sutton Brook Disposal Area Natural
Resource Damage Settlement, Town of Tewksbury,
Middlesex County, Massachusetts

In accordance with Trustee protocol regarding documentation for Natural Resource Damage Assessment and Restoration projects, the Massachusetts Executive Office of Energy and Environmental Affairs is providing its approval of the Final Restoration Plan and Environmental Assessment for the Sutton Brook Disposal Area Natural Resource Damage Settlement in Tewksbury, Massachusetts. The Final Restoration Plan and Environmental Assessment is hereby approved.

Approved by:



Rebecca L. Tepper, Secretary
Executive Office of Energy and Environmental Affairs
Commonwealth of Massachusetts

2/24/2023

Date

Appendix 3. National Environmental Policy Act Compliance

UNITED STATES FISH & WILDLIFE SERVICE

ENVIRONMENTAL ACTION STATEMENT

Within the spirit and intent of the Council of Environmental Quality's regulations for implementing the National Environmental Policy Act (NEPA) and other statutes, orders and policies that protect fish and wildlife resources, I have established the following administrative record and have determined that the action of the *Final Restoration Plan and Environmental Assessment for the Sutton Brook Disposal Area Natural Resource Damage Settlement*:

_____ is a categorical exclusion as provided by 516 DM 6 Appendix 1 and 516 DM 6, Appendix 1. No further documentation will therefore be made.

XX_____ is found not to have significant environmental effects as determined by the attached Environmental Assessment and Finding of No Significant Impact.

_____ is found to have significant effects, and therefore further consideration of this action will require a notice of intent to be published in the Federal Register announcing the decision to prepare an EIS.

_____ is not approved because of unacceptable environmental damage, or violation of Fish and Wildlife Service mandates, policy, regulations, or procedures.

_____ is an emergency action within the context of 40 CFR 1506.11. Only those actions necessary to control the immediate impacts of the emergency will be taken. Other related actions remain subject to NEPA review.

Other supporting documents (list):

Final Restoration Plan and Environmental Assessment for the Sutton Brook Disposal Area Natural Resource Damage Settlement

KYLA HASTIE

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Acting Regional Director/DOI Authorized Official

Date

FINDING OF NO SIGNIFICANT IMPACT
Final Restoration Plan and Environmental Assessment
for the
Sutton Brook Disposal Area Natural Resource Damage Settlement

The U.S. Department of the Interior and the Commonwealth of Massachusetts have completed a Final Restoration Plan and Environmental Assessment that explains the decisions of the Trustees to provide approximately \$1.65 million to support two ecological restoration projects in the Shawsheen River watershed in Tewksbury, Massachusetts. This restoration effort is a multi-year program that will restore, replace, and/or acquire the equivalent of the natural resources injured, destroyed, or lost as a result of contamination from the Sutton Brook Disposal Area Superfund Site in Tewksbury, Massachusetts. The restoration projects selected for funding include wetland and groundwater restoration at Poplar Street and wetland and floodplain restoration at Mollie Drive.

The Trustees provided the Draft Restoration Plan and Environmental Assessment for a 45-day public comment period beginning on October 26, 2022 and ending on December 9, 2022. A notice was published in the Tewksbury Town Crier announcing and requesting public comment. The Plan was also posted on the Town of Tewksbury website and emailed to the Shawsheen River Watershed Association. One written comment from the Tewksbury Open Space and Recreation Plan Committee supporting the preferred alternative was received. Some minor clarifications were incorporated into this Final RP/EA; however, the Trustees did not make any substantive changes to their preferred restoration alternative.

Based on a review and evaluation of the information contained in the Final Restoration Plan and Environmental Assessment, I have determined that the proposed actions do not constitute a major federal action which would significantly affect the quality of the human environment within the meaning of Section 102 (2)(c) of the National Environmental Policy Act (NEPA) of 1969. Accordingly, the preparation of an environmental impact statement on the proposed actions is not required at this time.

KYLA HASTIE

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Acting Regional Director/DOI Authorized Official

Date

Appendix 4. Comment on the Draft Restoration Plan and Environmental Assessment

Mr. Major

The Tewksbury Open Space and Recreation Plan Committee reviewed the recently released draft of the Restoration Plan and Environmental Assessment for the Sutton Brook Disposal Area. I realize I am a few days late in providing feedback, but the committee would like to advise you that we support the recommendations outlined in the report and look forward to seeing the continued restoration of these important natural resources in Tewksbury. We are charged with championing and implementing the open space and recreation elements of the Town Plan and this restoration activity aligns well with our objectives.

In the long term, we'd like to encourage and expand the use of these two spaces for passive recreation, so these restoration activities are important to us.

The committee would be happy to help in any way that we can. Please feel free to reach out to me if there is anything we can do.

Regards,
Tom Branchaud
Chair, Open Space and Recreation Plan Committee
Tewksbury, MA