Sheboygan River and Harbor Natural Resource Damage Assessment

A Supplement to the Restoration Plan and Environmental Assessment

Final Document / May 2020

Preamble:
The Trustees for the Sheboygan River and Harbor Natural Resource Damage Assessment and Restoration (NRDAR) – the United States Fish and Wildlife Service, the National Oceanic and Atmospheric Administration (NOAA), and the Wisconsin Department of Natural Resources (WDNR) – have selected five restoration projects to implement to restore the natural resources and services injured by the release of hazardous substances at the Sheboygan River and Harbor Site:

- Amsterdam Dunes Stream Restoration and Riparian Enhancement
- Willow Creek Fish Passage Improvement
- Willow Creek Invasive Species Removal
- Kiwanis Park Fishing Platforms
- Maywood Park Bridge Replacement and Fishing Access

These projects fit within the parameters of and are consistent with the selected alternative of the Final Sheboygan River and Harbor Natural Resource Damage Assessment Restoration Plan and Environmental Assessment (RP/EA). This Supplement to the Sheboygan River and Harbor Natural Resource Damage Assessment Restoration Plan and Environmental Assessment (RP/EA Supplement) continues the restoration planning process begun in the RP/EA.

The United States Department of the Interior (DOI) acted as the lead federal Trustee for preparing the RP/EA and NOAA participated in its development as a cooperating federal agency pursuant to the National Environmental Policy Act (NEPA) (40 CFR § 1508.5). Those roles have not changed for this RP/EA Supplement. The state of Wisconsin as a non-Federal Trustee and partner assisted in the development of the RP/EA Supplement and the RP/EA.

1. Introduction:
The Final Sheboygan River and Harbor Natural Resource Damage Assessment Restoration Plan and Environmental Assessment was published in March of 2018. The purpose of the RP/EA was to describe how the Trustees for the Sheboygan River and Harbor NRDAR – the United States Fish and Wildlife Service, the National Oceanic and Atmospheric Administration (NOAA), and the Wisconsin Department of Natural Resources (WDNR) – would utilize funds from natural resource damages for the restoration of natural resources and services injured by the release of hazardous substances at the Sheboygan River and Harbor Site. Injuries to natural resources in the lower 14 miles of the Sheboygan River and adjacent floodplain, including sediment, soil, invertebrates, fish, reptiles, amphibians, birds, and mammals, were caused by exposure of those resources to polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and other contaminants. These injuries resulted in a loss of the ecological and recreational services that assessment area resources would otherwise have provided.

The Trustees reached a settlement of their natural resource damage claims with Tecumseh Products Company, Thomas Industries, and Wisconsin Public Service Corporation (WPSC). Under this settlement,
these parties paid $4.5 million to support restoration, preservation, recreational enhancements, and past Trustee costs relevant to natural resource injuries. Consistent with the DOI NRDA regulations and NEPA, the Trustees evaluated a suite of alternatives for conducting the type and scale of restoration sufficient to compensate the public for natural resource injuries and service losses. This restoration will be implemented with the funds from the settlement. Based on factors such as location, technical feasibility, cost effectiveness, provision of natural resource services similar to those lost due to contamination, and net environmental consequences, the Trustees selected the preferred alternative, Alternative C: Restoration Within and Beyond the Assessment Area, for implementation. Under the selected alternative, the Trustees will conduct wetland and riparian restoration; wetland, riparian, and ecologically-associated upland preservation; and recreational enhancement projects within the Sheboygan River Basin within Sheboygan County.

The Trustees have now selected five restoration projects, for a total approximate cost of $801,000, that are consistent with Alternative C of the RP/EA. These projects have been described in detail and were evaluated as new alternatives in chapter 3 of this Supplement. Future projects will be reviewed and evaluated through the same process.

1.1 Summary of the RP/EA

Consistent with the federal NRDA regulations and NEPA, the RP/EA evaluated reasonable restoration alternatives and identified a preferred alternative that will provide benefits that are linked directly to potentially injured natural resources or related service losses, and would not otherwise be generated (i.e., but for NRDA funding the project would not occur within a reasonable timeframe).

The Trustees evaluated three general restoration alternatives and the Trustees selected Alternative C for implementation: Restoration Within and Beyond the Assessment Area. Alternative C includes projects that fit within three general categories:

- Wetland and Riparian Restoration Projects
- Wetland, Riparian, and Ecologically-Associated Uplands Preservation (includes specifically Amsterdam Dunes and Willow Creek)
- Recreational Fishing Enhancement Projects

As noted above, the selected alternative included two land acquisitions for purposes of conservation and preservation – Amsterdam Dunes and Willow Creek. The Trustees anticipated that future restoration projects could occur on the two properties or at other locations.

1.2 Compliance with Other Authorities

In addition to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and NEPA, other legal requirements may apply to NRDA restoration planning or implementation. The Trustees will ensure compliance with all authorities applicable to restoration projects. Whether and to what extent an authority applies to a particular project depends on the specific characteristics of a particular project, among other parameters. The subset of authorities listed below is the most relevant for the proposed acquisition and conservation actions and may be relevant for future restoration projects proposed for the Sheboygan River and Harbor NRDA:

- Endangered Species Act (16 U.S.C. §§ 1531 et seq.),
- National Historic Preservation Act (16 U.S.C. §§ 470 et seq.),
• Coastal Zone Management Act (16 U.S.C. §§ 1451-1464),
• Federal Water Pollution Control Act (Clean Water Act, 33 U.S.C. §§ 1251 et seq.),
• Migratory Bird Treaty Act (16 U.S.C. §§ 703-712), and
• Bald and Golden Eagle Protection Act (16 U.S.C. §§ 668-668c).

1.3 Public Participation
Public participation and review is an integral part of the restoration planning process. The Trustees made the draft RP/EA Supplement available for review and comment for a period of 30 days in accordance with Section 111(i) of CERCLA, 42 USC 9611(i), and NEPA. The Trustees received one comment from a local citizen expressing support for Alternatives 2 and 4. The Trustees selected Alternatives 2 and 4 consistent with the RP/EA. As additional restoration opportunities are identified, including other preservation possibilities, the Trustees will develop other project-specific restoration plan supplements, with additional NEPA analyses where applicable. The Trustees will notify the public when these restoration plans are available for public review.

2. Proposed Restoration Alternatives and Evaluation:
The Trustees evaluated restoration alternatives that would provide benefits that are linked directly to potentially injured natural resources or related service losses, and would not otherwise be generated (i.e., but for NRDAR funding the project would not occur within a reasonable timeframe). The Trustees also considered whether the projects analyzed under each alternative are consistent with the restoration planning guidance in the federal NRDAR regulations (43 CFR §11.82) and the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 et seq.). Specifically, the DOI NRDAR regulations list ten factors to consider when evaluating restoration alternatives (43 CFR § 11.82 (d)).

• 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,
• The results of 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 services,
• The 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, and,
• Compliance with applicable federal, state, and tribal laws.

2.1 Alternative 1: No Action (Non-preferred)
Under Alternative 1, the “No Action Alternative,” no restoration actions would be conducted during or after remediation is completed. Remedial actions designed to protect human health and the environment from unacceptable risk will be completed as directed by state and federal authorities. However, these remedial requirements are not expected to immediately return natural resources to baseline ecological conditions (i.e., conditions but for the release of Contaminants of Concern (COCs)). Natural resources will likely take years to attenuate to baseline contaminant concentrations (e.g., PCBs) after remedial actions are completed, given the continued presence of the contaminants within the system.
Similarly, the “No Action Alternative” is not expected to compensate the public for interim ecological and human use service losses (i.e., losses that occurred pre-remedy and extend until COC concentrations return to baseline) due to COCs released into the assessment area. Remedial actions, which focus solely on removal or containment of contamination, reduce future injury but do not restore natural resources to their baseline conditions and do not make the public whole.

Lastly, the “No Action Alternative” would not utilize settlement monies for restoration or acquisition of the equivalent of lost resources and resource services, which is the purpose of the NRDAR. Therefore, the “No Action Alternative” serves as a point of comparison to determine the context, duration, and magnitude of any environmental consequences that might result from the implementation of other restoration actions.

2.2 Alternative 2: Wetland and Riparian Restoration Projects (Preferred)

The Trustees considered projects that achieve the reestablishment or enhancement of aquatic and riparian habitat along the Sheboygan River and its tributaries that have been injured by the release of hazardous substances. Project types that are consistent with this category are further described in 5.2.2 in the RP/EA; three proposed projects have been identified at this time and are described in more detail below:

Photo 1: Location of Wetland and Riparian Restoration Projects
Amsterdam Dunes Stream Restoration and Riparian Enhancement:
The trustees propose to commit approximately $345,000 for this project to identify and repair sources of erosion and runoff contributing to degradation of waterways, wetlands and Lake Michigan by addressing urgent needs to restore stream and riparian habitat function at Amsterdam Dunes. The stream channels proposed for restoration are currently incised (vertically contained, abandoned floodplains) with eroding and sloughing banks. This stream state is likely a result of previous land use activities including row crop cultivation and installation of drainage tiles within the watershed. Restoration within the watershed and the proposed project actions will restore stream function, stabilize banks, reduce channel erosion, reduce sediment and nutrient inputs from upstream sources, enhance aquatic and riparian habitat, restore hydrologic function to degraded wetlands, restore diverse, native riparian vegetation, and control invasive species. Specifically, a watershed evaluation and field assessment will be completed to inform a Natural Channel Design (NCD) for the problem areas. Approximately 2,734 linear feet of tributary streams will be restored by re-meandering the channel through its historic floodplain and establishing a diverse bedform. Bank stabilization will involve grading and shaping of the channel as well as installing native vegetation in the riparian buffer.

NRDA Evaluation: The Preserve is an important coastal resource and migratory stopover site for a number of common birds, as well as those listed as threatened, endangered, special concern (TES), or Species of Greatest Conservation Need (SGCN). Many of these species require the same habitat – aquatic and wetland ecosystems where PCB contamination occurred. Activities such as invasive species control and enhancement of riparian buffer will enhance the rich, diverse, and unique communities inhabited by many large and small mammals, birds, insects, and amphibians. Aquatic and wetland-dependent species which have been disproportionately affected by containments will benefit the most from this project. Therefore, this project was determined to restore habitat for fish and wildlife species injured by PCBs/PAHs in the Sheboygan River and Harbor area. The project was also considered favorable when evaluating DOI NRDA regulations.

Willow Creek Fish Passage Improvement:
The trustees propose to commit approximately $27,000 for this proposed stream restoration project to improve water quality and fish habitat, ultimately restoring the health of the riparian ecosystem. The project will address the removal of one 24” culvert and one 36” culvert on the Willow Creek Preserve. These culverts no longer serve a necessary purpose due to change in land ownership and property intentions. The culverts were constructed at a time when the land was used for residential and agricultural purposes and vehicular access was necessary. From an ecological standpoint, the culverts are an impediment to anadromous fish species and prevents them from successfully reaching upstream spawning habitat, especially during times of low water levels. In addition, there will be restoration of the streambed adjacent to the culverts, such as bank stabilization, repositioning of large course woody debris, and riparian vegetation enhancement.
NRDA Evaluation: This proposed project is a first step to improving the water quality and habitat for fish that currently utilize a rare cold-water system. In addition, restoration of the creek may result in an increase in the diversity of species that use the creek, potentially resulting in the return of species that where historically observed here, but have not been seen in decades as a result of the degradation of the water ecosystem. Willow Creek has the potential to support self-sustaining brook trout population as well as migratory salmonids, but not in its current condition. Therefore, this project was determined to restore habitat for fish and wildlife species injured by PCBs/PAHs in the Sheboygan River and Harbor area. The project was also considered favorable when evaluating DOI NRDA regulations.

Willow Creek Invasive Species Removal:
The trustees propose to commit approximately $233,000 for this project to manage high priority invasive terrestrial species within wetland, riparian corridor, and upland habitats, which threaten the health, function, and sustainability of the surrounding natural ecosystem. This project will improve the ecosystem health of the Willow Creek Preserve through high priority invasive species eradication (Buckthorn, Honeysuckle, Japanese Knotweed, and Phragmites), using the most effective methods in combination of mechanical and chemical control. Long term plans involve annual monitoring of invasive species and re-evaluation of effectiveness. Additional herbicide treatments may be necessary and seeding/planting of native shrubs, forbs, and grasses in areas where invasive species were removed will be needed following effective chemical control measures for successful re-establishment of native habitat.

NRDA Evaluation: This project focuses on increasing the diversity and quality of priority wetland and associated upland habitat through removal of invasive species and the re-vegetation of native species. These restoration activities would increase nesting and food for a variety of fish, birds, and other wildlife, providing ecological services similar to those injured. Therefore, this project was determined to restore habitat for fish and wildlife species injured by PCBs/PAHs in the Sheboygan River and Harbor area. The project was also considered favorable when evaluating DOI NRDA regulations.

2.3 Alternative 3: Wetland, Riparian, and Associated Uplands Preservation (Non Preferred)
The Trustees considered high priority projects that may preserve wetland, riparian, and ecologically-associated upland habitats essential to a variety of fish and wildlife species, including species that are the same as or similar to those injured by PCB releases along the Sheboygan River. Habitats may be preserved through land acquisition, land donations and/or transfers, or conservation easements. Selection of specific parcels that will be preserved would involve consideration of a variety of factors, as described in section 5.2.3 in the RP/EA.

NRDA Evaluation: This alternative was determined to restore habitat for fish and wildlife species injured by PCBs/PAHs in the Sheboygan River and Harbor area. This alternative was also considered favorable
when evaluating DOI NRDA regulations. However, at this time, no specific land opportunities have been identified; therefore, this alternative is non-preferred.

**2.4 Alternative 4: Recreational Fishing Enhancement Projects (Preferred)**

This category of projects includes actions that enhance recreational fishing opportunities in riparian and riverine habitats. Projects in this category are intended to compensate for recreational fishing losses caused by PCB releases to the Sheboygan River. Project types that are consistent with this category are further described in 5.2.4 in the RP/EA; two proposed projects have been identified at this time and are described in more detail below:

![Photo 2: Location of Recreational Fishing Enhancement Projects](image-url)

**Kiwanis Park Fishing Platforms:**

The trustees propose to commit approximately $23,000 for this project to expand public fishing access to the Sheboygan River at Kiwanis Park. This will be achieved through the installation of three fishing areas constructed out of the stone boulders placed at the shoreline and natural materials used to designate a pathway to the fishing platforms. Two fishing stone access areas exist at the site and they fall short of being able to accommodate the growing needs of the public in this area. The additional access points will also deter the public from accessing the water where there has been riparian restoration of native plants. Additional fishing opportunities along the Sheboygan River will compensate the public for the diminished use of the fishing resource as a result of contaminants.

**NRDA Evaluation:** This project proposes to expand public fishing access to the Sheboygan River. Therefore, this project was determined to compensate the public for
recreational fishing losses caused by PCB/PAH releases to the Sheboygan River and Harbor area. The project was also considered favorable when evaluating DOI NRDA regulations.

Maywood Park Bridge Replacement and Fishing Access:
The trustees propose to commit approximately $173,000 for this project to restore and enhance public access to the Pigeon River for fishing and educational activities at Maywood Environmental Park. This project will replace a deteriorating bridge between Maywood Environmental Park and Evergreen Park with a new bridge that provides accessible fishing areas at the edge the river and accessible fishing bump-outs on the bridge that would allow an angler easier access to the Pigeon River. The Pigeon River is a smaller stream that is publically accessible and could provide enhanced opportunities for residents and visitors to fish and access the river and this project will help meet those objectives. Construction of asphalt pathways to the bridge approaches that meet ADA requirements will also be needed.

NRDA Evaluation: This project proposes to restore and enhance public fishing access to the Pigeon River. Therefore, this project was determined to compensate the public for recreational fishing losses caused by PCB/PAH releases to the Sheboygan River and Harbor area. The project was also considered favorable when evaluating DOI NRDA regulations.

3. NEPA Evaluation:
Chapter 3 of the RP/EA fully describes the affected environment, including the current physical, biological, socioeconomic, and cultural resources within the affected area. That information, which is incorporated here by reference, has not changed and remains relevant relative to the proposed restoration projects in this RP/EA Supplement. Moreover, there are no new or project-specific environmental resources that were not described and evaluated in the RP/EA that warrant additional NEPA analyses in this RP/EA Supplement.

In Chapter 6 of the RP/EA, the Trustees examined the likely beneficial and adverse impacts of Restoration Within and Beyond the Assessment Area – Wetland and Riparian Restoration Projects; Wetland, Riparian, and Ecologically-Associated Uplands Preservation; Recreational Fishing Enhancement Projects – on the quality of the human environment, including context and intensity. The Trustees concluded that the actions associated with the Selected Alternative will not lead to significant impacts. Therefore, the Trustees did not proceed with an EIS.

General categories of projects that the Trustees would support funding under the preferred Alternative C in the RP/EA were analyzed for any potential direct, indirect, and cumulative ecological, social, and economic impacts associated with each. The NEPA analysis from the RP/EA is incorporated by reference and is briefly summarized below. The five proposed projects in this supplement are consistent with the selected alternative of the RP/EA and have no expected adverse effects beyond the scope of the previous analysis. Therefore, the Trustees conclude that no additional NEPA analysis is necessary.
3.1 Evaluation of Alternative 1: No Action

The “No Action Alternative” does not provide the ecological, recreational, and socio-economic benefits described in the other alternatives. It may result in adverse impacts to fish and other wildlife, as well as reductions in the ecological and human use services provided by riverine and floodplain habitats, due to the lack of additional habitat functionality provided through restoration and/or preservation actions in the Sheboygan River area. Therefore, the “No Action Alternative” is not a favorable restoration alternative, as analyzed in 6.2 in the RP/EA.

3.2 Evaluation of Alternative 2: Riparian Restoration Projects

Wetland and riparian restoration project actions are expected to cause minor, short-term, localized impacts to existing resources and resource services, and result in moderate long-term benefits across a broad geographic scope, as analyzed in 6.3.1 in the RP/EA.

3.3 Evaluation of Alternative 3: Wetland, Riparian, and Associated Uplands Preservation

Preservation projects are expected to cause indirect long-term, moderate to major beneficial impacts to natural resources that utilize the conserved area, providing ecological and human use services and contributing to restoration of habitat types that previously existed and naturally occurred in these areas. The environmental impacts of potential projects are anticipated to be beneficial, as analyzed in 6.3.2 in the RP/EA.

3.4 Evaluation of Alternative 4: Recreational Fishing Enhancement Projects

Improvements to existing access areas and creation of new access areas within the Sheboygan River and Harbor NRDAR assessment area would provide compensation for reduced recreational fishing opportunities associated with Site-related contamination. Compared to the “No Action Alternative”, the environmental impacts of potential projects are anticipated to be minor and in many cases beneficial, as analyzed in 6.3.3 in the RP/EA.

3.5 Cumulative Impacts Evaluation

Finally, the cumulative environmental consequences of the proposed projects under Alternatives 2, 3, and 4 are expected to be beneficial to natural resources injured as a result of the release of hazardous substances. These alternatives in combination with one another do not result in any additional or compounding adverse effects. Cumulatively, it is anticipated that there may be an adverse effect to natural resources injured were the “No Action Alternative” selected because the proposed restoration would not occur.

Conclusion: Preferred Alternative

The Trustees evaluated four restoration alternatives. Based on the Trustees’ evaluation of the environmental consequences and the NRDA restoration factors described in 43 CFR § 11.82(d), and the geographic scope of the alternative, the Trustees have selected Alternatives 2 and 4 for implementation at this time.

While Alternative 3 addresses natural resource injuries, there were no specific parcels and willing landowners identified adjacent to Amsterdam Dunes or Willow Creek Preserves, and was therefore not selected for implementation (i.e., non-preferred) at this time.
Where applicable, the Trustees will prepare additional restoration plans and NEPA reviews for future proposed projects. Such future restoration plans will consider the cumulative impacts of the proposed restoration project(s) along with other proposed or selected actions for the Sheboygan River and Harbor NRDAR Site. In addition, a Section 7 consultation (under the Endangered Species Act) will be completed for restoration projects that may affect threatened or endangered species and Section 106 of the National Historic Preservation Act will be followed for each restoration project that will be implemented.
Appendix A: Public Comments

[EXTERNAL] Comment on 5-Project Supplement to Sheboygan River Restoration

Tue 4/28/2020 12:04 AM
To: Soyk, Trina J <trina_Soyk@fws.gov>
Attn: Trina Soyk, US Fish & Wildlife Service
Date: April 28, 2020

As a Sheboygan County resident, I have visited every one of the four additional project areas!

Amsterdam Dunes, aside from being a migratory bird stopover, is adjacent to one of the oldest hawk banding operations in the US--over 70 years & still going strong. Besides having many rare habitats, Amsterdam Dunes also serves as a Wetland Mitigation Bank, an asset to our county.

I have to admit, I live about two blocks from Willow Creek and consider it the Central Park of the City of Sheboygan.

Old timers say that before I-43 went in, the creek was full year round, suckers & trout in the Spring and salmon in the Fall. Now when hiking there, a person can find numerous places where fish passage is hindered.

When driving to the main entrance for Willow Creek, one notices the large patch of phragmites at the Mall that was built across the street from the Preserve. I know some folks think the stuff looks beautiful, but since the mall runoff goes into the Preserve, the phragmites came with it, joining Japanese knotweed, buckthorn, garlic mustard, honeysuckle & others.

The times I've lunched at Kiwanis Park, I did notice residents fishing right at the edge of the Sheboygan River, and though I know very little about fishing, I do feel platforms would protect the habitat along the river's edge and help curtail fishing trash left behind.

The Elwood H May Environmental Park (Maywood), has been a County gem for over 35 years and is looking at many future ways it can benefit & serve ALL members of the community. The Pigeon River corridor is a good place to start.

I thank you so much for considering these additional projects. Respectfully submitted,

Mary Kohl
Sheboygan, WI