



# Gill Creek Conceptual Restoration Plan



**BUFFALO NIAGARA  
WATERKEEPER®**

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# Gill Creek Conceptual Restoration Plan

## Introduction

Gill Creek is a highly impaired tributary to the Niagara River that flows through the Tuscarora Nation, Town of Lewiston, Town of Niagara, and City of Niagara Falls in Niagara County, New York. Buffalo Niagara Waterkeeper is proud to continue to focus on the Gill Creek corridor as a priority location to apply our projects and programs. We aim to restore the creek to a safe, healthy, and accessible community waterway.

In 2021, Buffalo Niagara Waterkeeper (BNW) invested in drafting a preliminary conceptual restoration plan for the Gill Creek Corridor. The conceptual restoration plan is an overall framework that BNW and others can utilize that outlines the available opportunities to improve water quality and access along Gill Creek. The main strategies identified in the draft Gill Creek Conceptual Restoration Plan include:

- 1) The design and implementation of several living shoreline restoration projects along Gill Creek and Hyde Park Lake;
- 2) Improved golf course management practices that reduce nutrient, and chemical inputs;
- 3) Targeted community outreach and education about water-smart landscape practices and fostering stewardship of restored areas; and,
- 4) Improved connectivity and access to surrounding regional assets and trail systems.

The draft of the conceptual restoration plan captures a rough blueprint as envisioned by BNW and relevant planning efforts previously completed for this geography. However, additional input from local community groups and stakeholders was critical to ensure the scope of work outlined in the plan reflects the needs of those that reside and recreate along this waterway and is aligned with the priorities of the current municipal leaders and residents.

In 2022, BNW received funding from the Greenway Ecological Standing Committee to support the next phase of the Gill Creek Conceptual Restoration Plan. This next phase of the conceptual restoration plan prioritized robust community, partner, and stakeholder engagement in order to identify priority areas for future projects and garner support for implementation.

The following document summarizes BNW's knowledge of and experience within the Gill Creek corridor to date, captures the results of this community-driven phase of the Gill Creek Conceptual Restoration Plan, discusses opportunities for future restoration, and includes detailed information on top priority projects identified through this effort.

## Background

Gill Creek is 7.6 miles long and has a total drainage area of 13.9 square miles. The Gill Creek sub-watershed is located in portions of the Tuscarora Nation, Town of Lewiston, Town of Niagara, and City of Niagara Falls. Gill Creek originates on the Tuscarora Nation and flows south to the creek's mouth at the Upper Niagara River in the City of Niagara Falls. See the Watershed Location Figure in Attachment A. The sub-

watershed is located between the Niagara Escarpment to the north and Onondaga Escarpment to the south. The land surface between the escarpments is poorly drained and relatively flat. Elevations in the watershed range from approximately 620 feet at headwaters to approximately 560 feet at the Niagara River confluence.

According to the Buffalo and Niagara Rivers Habitat Assessment created by BNW in 2008, Gill Creek's warmwater fish community is dominated by forage fish species like minnows and sunfish. Fish sampling (seining and/or electrofishing) at 16 sites along Gill Creek in May, July and September 2004 found 37 species dominated by emerald shiner, bluntnose minnow and pumpkinseed in lower reach, creek chub in middle reach, and brook stickleback, central mudminnow, fathead minnow and white sucker farthest upstream (Gomez and Sullivan, 2004). Hyde Park Lake is stocked with brown trout by the New York State Department of Environmental Conservation (NYSDEC) each spring to support recreational fishing (NYSDEC, 2023). The Buffalo and Niagara Rivers Habitat Assessment states that crappies, bullheads and other panfish were also stocked into Hyde Park Lake.

The Gill Creek sub-watershed has been severely impacted by human activities. These activities include building of transportation infrastructure, construction of dams and other instream barriers, industrial and municipal waste disposal practices, stream channelization, land use conversion and development, and impacts from New York Power Authority (NYPA) power production. There are no NYSDEC Critical Environmental Areas and no NYSDEC Natural Heritage Program (NHP) occurrences of rare plants, animals or natural communities documented in watershed. There are 36 NYSDEC Remediation Parcels that are within or overlap with the Gill Creek sub-watershed. These sites comprise approximately 15% of sub-watershed. See the Remediation Site Figure in Attachment A. Additionally, there are no legal combined sewer overflows (CSOs) in Gill Creek but there has historically been illegal dumping and sewage connections along the creek, in part due to inadequate infrastructure (State University of New York (SUNY) College at Buffalo, 1982). Sewage dumping and discharge into Gill Creek was addressed during a large remediation project along Gill Creek / Hyde Park Lake in the 1980s and during subsequent infrastructure improvements. However, as far as BNW is aware e. coli testing upstream in Gill Creek has not been completed to confirm whether the issue was resolved entirely.

Impacts along Gill Creek resulting from NYPA power production include water level fluctuations, flow diversions, alterations to groundwater flow patterns, and stream channelization. Within the Hyde Park Golf Course, managed by the City of Niagara Falls, the NYPA power project conduits cross beneath Gill Creek (more details below). Lower Gill Creek (from its mouth to Porter Road) is a part of the Niagara River Area of Concern (AOC).

The current conditions as described along the creek represent significant constraints and challenges to the ecological condition of the sub-watershed. However, many opportunities for restoration exist in the sub-watershed. Many grant funds focused on restoration are limited to projects that occur on publicly owned lands with willing municipal partners, and much of the Gill Creek shoreline falls within public lands. See the Potentially Publicly Owned Parcels Figure in Attachment A. From the mouth of Gill Creek upstream to Pine Avenue is a Department of State (DOS) Coastal Boundary and the entirety of Gill Creek in the City of Niagara Falls is being included in the City's in-progress Local Waterfront Revitalization Plan (LWRP). Gill Creek is also located within the Niagara River Greenway and partially within the Niagara River AOC.

Through these two avenues, additional funding opportunities for remediation and restoration projects exist.

### Geographic and Contextual Information

At its headwaters, Gill Creek drains a large, forested wetland complex upstream of Walmore Road, on the southwest side of the Tuscarora Nation territory. This area is known, through Tuscarora oral history, as “The Swamp” (Tuscarora Nation, 2008; personal communication with Tuscarora Nation members). The area is roughly 450 acres and is predominantly characterized by a dense emergent, predominantly herbaceous, vegetation community.

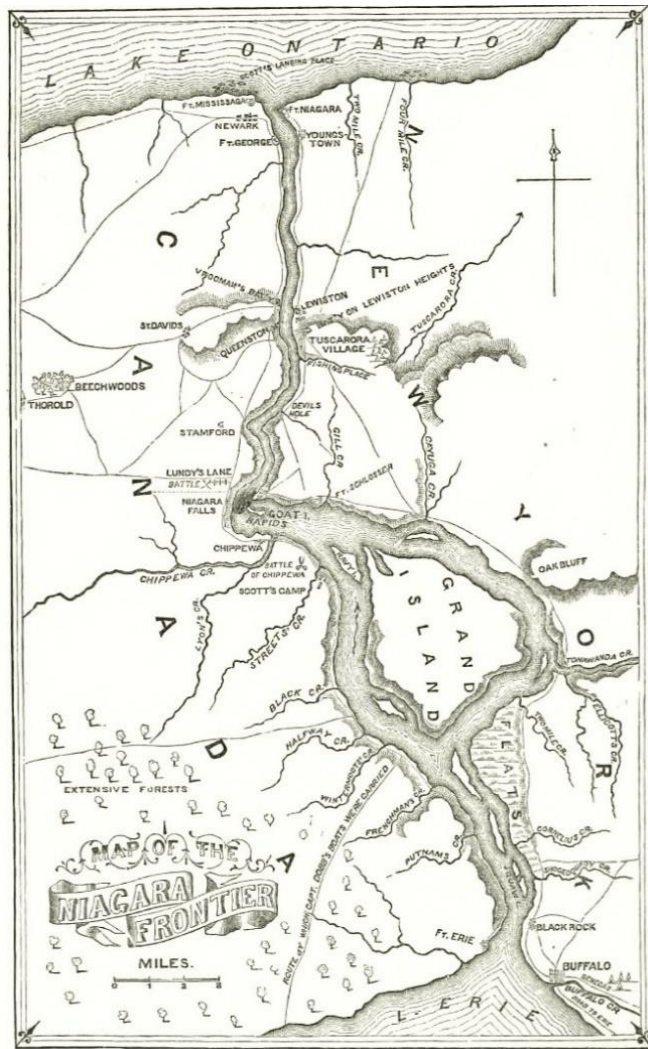


Figure 1. Map of Gill Creek in Context of War of 1812  
 Source: Map of the Niagara Frontier, 1869, Benson J. Lossing in *The Pictorial Field-Book of the War of 1812*. Illustration. Reference Code: 971 .034 LOS, page 382. Archives of Ontario Library.  
 Illustration Reference Code: 971 .034 LOS, page 382. Archives of Ontario Library

Prior to the 1930s, Gill Creek was a resource for freshwater fish for the Nation, before Gill Creek was dammed about 1.2 miles upstream from the creek’s mouth to create the 30-acre Hyde Park Lake (City of Niagara Falls, 2013). Tuscarora oral histories record Gill Creek and the headwaters as having contained fish such as grass “pike” and “sucker” fish (Tuscarora Nation, 2008).

In addition, Gill Creek’s headwaters were significantly impaired by the creation of the NYPA Reservoir. In 1958, the state government seized about one-fifth of Tuscarora Nation tribal lands via eminent domain for the creation of the new hydropower power plant. The Tuscarora Nation fought this expropriation to the United States Supreme Court. On March 7<sup>th</sup>, 1960, the New York Power Authority won a Supreme Court decision for the right to take 550 acres of the Tuscarora Reservation and flood that land for the creation of the reservoir. Today, the NYPA Reservoir occupies over half the upper watershed, an area that was previously partially headwaters wetlands on Tuscarora Nation Land. See Figures 1 and 2 for illustration of the original route of the creek headwaters in the Tuscarora Nation. Figure 3 illustrates the route of Gill Creek after the hydropower reservoir was built, in comparison to the former boundary of the Tuscarora Nation.

The remaining headwater areas currently lacks habitat diversity and open water areas and is also being colonized by invasive plant species (Tuscarora Nation, 2008). Gill Creek often runs dry in the headwaters, and stream channels are not well defined. However, it is possible that channel flow is present during higher water conditions. These conditions contribute to the decline in habitat and wildlife values and functions.

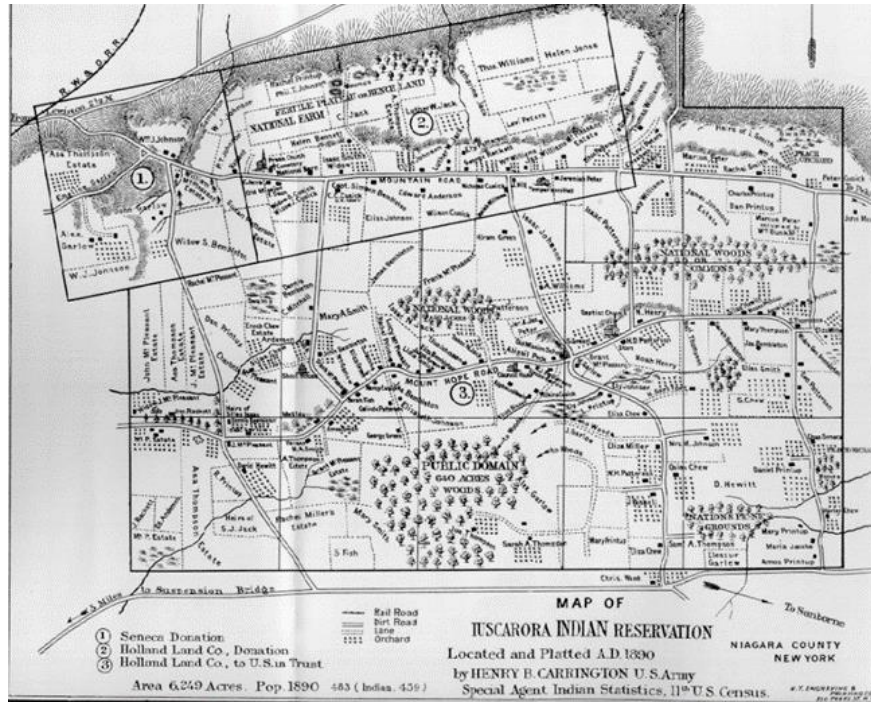


Figure 2. Map of Tuscarora Nation in 1890. See Gill Creek headwaters in southwest corner. Source: *The Six Nations of New York. The 1892 United States Extra Census Bulletin (Documents in American Social History by Robert Venables.*



Figure 3. Aerial image of current NYPA Reservoir and Gill Creek with former boundary of Tuscarora Nation shown in a yellow outline. Source: *Hidden Waters Blog.*

From the headwaters, Gill Creek flows southwest, crosses Garlow Road via a concrete culvert, and continues downstream along the southeast side of the NYPA Reservoir for approximately 9,000 feet. This section of the creek surrounding the NYPA Reservoir is the most highly altered section of the creek. Here the creek was rerouted for the construction of the NYPA Reservoir between 1957-1961 and channelized (trapezoidal in cross section and lined with stone with steep rock walls as banks in some parts). In this section of the creek, the NYPA Reservoir is directly adjacent to the right descending bank, and a power line corridor is on the left. Gill Creek effectively functions as a ditch where it has been channelized and rerouted around the reservoir's southern perimeter until it reaches the original stream bed and turns south on its way to the Niagara River.

South of the channelized section that flows along the NYPA Reservoir, water from NYPA Reservoir is discharged to Gill Creek through a forested flow augmentation channel to supplement naturally occurring flow conditions. It is BNW's understanding that this augmentation flow from NYPA Reservoir ranges from a high of approximately 3 cubic feet per second (cfs) in the summer and falls to zero in the winter and spring. The augmentation flow channel was created in 1982, as part of a major environmental remediation and clean-up project along Gill Creek and Hyde Park Lake (SUNY College at Buffalo, 1982). The project was designed to restore Hyde Park Lake to its original depth and improve the water quality. It was an Environmental Protection Agency Project and the Towns of Niagara and Lewiston, and the City of Niagara Falls partnered to meet the 50% cost share.

The augmentation part of the project allowed Niagara County to draw fresh water from the NYPA Reservoir to supplement the flow in Gill Creek during the summer months. The extra water flows through a 16-inch underground pipe from the reservoir to a tributary to Gill Creek, downstream of the channelized section. At the time, a sonic level detector was installed at the Niagara Frontier State Park maintenance building (at Witmer and Military Roads) when the remediation project was completed. This detector monitored creek flow to the required 3 cfs. Should the flow exceed or drop below this level, a signal from this detector transmitted back to the sprinkler room.

BNW had several conversations with NYPA, Niagara County, and the City of Niagara Falls to determine the current status of responsibility for the flow augmentation channel. During 2023 stakeholder conversations, it remained unclear on who currently maintains responsibility for controlling the inputs to Gill Creek. The original 1980s agreement to control NYPA Reservoir inputs to Gill Creek was between NYPA and Niagara County. However, in 1999, Niagara County passed a resolution to abandon the Hyde Park Lake/Gill Creek remediation program and use the remaining funds in the reserve account for a capital project. Currently, Niagara County Department of Public Works believes they have divested from the project and are no longer involved in controlling NYPA flows into the creek.

The forested flow augmentation channel section of the creek appears relatively natural, surrounded by vacant brushland and forest, until it reaches a residential neighborhood at Hewitt Road. Here the creek was also rerouted during the construction of the NYPA Reservoir and remains highly impacted. The creek crosses several roads via culverts and is tunneled underneath Reservoir State Park for 600 feet, south of Military Road and north of State Route 31. Downstream of Reservoir State Park the creek flows through commercial land and more single-family residential neighborhoods. In this section, just south of Witmer Road, Gill Creek runs along the eastern side of a state superfund site, the former Witmer Road Drive In.

According to NYSDEC's environmental assessment, "...site groundwater impacts are limited due to the low permeable soils, and evidence of groundwater contaminant migration was not detected. Surface water and sediment in Gill Creek do not appear to have been affected by the waste material or the localized ground water contamination. As such, the site does not currently represent a significant threat to the environment" (NYSDEC, n.d.-a). As the creek continues to flow downstream south of Isherwood Drive, it is crossed by Interstate 190, and flows through the currently closed Town of Niagara – Lockport Road Landfill. The landfill was closed and capped in the late 1980s. There is no evidence indicating that hazardous waste disposal occurred on this site (NYSDEC, n.d.-b). Next, Gill Creek is crossed by Lockport Road before going underground again at an active rail yard.

The creek passes underneath the active rail yard for approximately 660 feet through a concrete culvert. Just downstream of the rail yard, there is a turbid, approximately 1.75-acre pond before Gill Creek enters Hyde Park Golf Course. The pond is formed by a dam at its southern end which also presents a barrier to fish movement. This pond was also created during the major 1980s Hyde Park Lake remediation project described earlier. The pond was constructed as a settling basin upstream of Hyde Park Lake to prevent future sediment build ups and to trap debris before it flows into the lake (SUNY College at Buffalo, 1982).

When Gill Creek enters the Hyde Park Golf Course, the stream is channelized for approximately 635 feet with little riparian buffer on either side and then enters a 700-foot-long concrete lined channel. A golf cart path crosses the concrete lined portion of the creek. In this section, the NYPA conduits are buried underneath Gill Creek. The NYPA conduits draw water from the Niagara River approximately 1,000 feet upstream of the mouth of Gill Creek. The conduits are buried underground and run 4 miles to the north to reach the NYPA Powerplant. Since completion of the power project, ground water within 0.5 miles of both sides of the buried twin conduits flows toward the conduits and into the drain system that surrounds them (United States Geological Survey, 1987).

The lands that include the NYPA Power Project conduits are considered part of the project boundary approved by the Federal Energy Regulatory Commission (FERC) and, thus, there are guidelines for the performance of land management activities. This is a constraint when considering restoration opportunities along Gill Creek. NYPA will perform and allow only those practices and uses that are within Article 411 of the license (FERC's standard use and occupancy articles). Any other proposed uses or practices will be subject to the standard FERC notification and permitting process (Niagara Power Project Relicensing Land Management Plan FERC No.2216, 2008).

Next the creek meanders through a forested section of Hyde Park Golf Course, north of Porter Road. In this section of the creek, three golf cart paths cross the creek. Here is a small dam with an approximately one-foot vertical drop. The dam likely prevents some fish species from Hyde Park Lake from traveling further upstream (Niagara Power Project (FERC No. 2216), 2004).

South of Porter Road, Gill Creek is impounded and creates the 30-acre Hyde Park Lake, the center of Hyde Park. Land use around the lake is generally recreational fields consisting of Hyde Park, and the Hyde Park Golf Course. At 715 acres, Hyde Park is the largest city-owned public open space in the City of Niagara Falls. The park around the lake is heavily used and the lake receives some fishing pressure. The dam creating the impoundment is just upstream of Pine Avenue and provides a documented barrier to any fish movement upstream from the river. The 1980s remediation project mentioned previously in Gill



Creek/Hyde Park Lake also involved the draining and dredging of Hyde Park Lake to remove accumulated sediment and debris.

Hyde Park Lake is also fed by a tributary at the northeast end. This tributary starts in the Town of Niagara and flows through Veteran's Memorial Park. The creek then flows through town-owned land behind a neighborhood before crossing the NYS-190 and entering the City of Niagara Falls. In the City of Niagara Falls, the tributary flows through a rail yard, a power line corridor, and an inactive solid waste landfill (New Road) before entering Hyde Park and connecting with the main stem of Gill Creek in the northern part of Hyde Park Lake.

Downstream of Hyde Park Lake, a small dam approximately two feet high located just upstream of Walnut Avenue acts as a barrier to fish movement during summer low flow conditions. Here, Gill Creek flows through the city of Niagara Falls, mostly following Hyde Park Boulevard through residential housing until it intersects with Packard Road. Where Gill Creek parallels Hyde Park Boulevard there is either minimal (<25 feet) or no riparian buffer separating the creek from the road. Then Gill Creek follows Packard Road along the recreational fields at Gill Creek Park until Packard Road turns into Veterans Drive and ultimately crosses Buffalo Avenue. There are six road crossings within this section of the creek: Pine Avenue, Hyde Park Boulevard, Ferry Avenue, Niagara Street, Packard Road, and Buffalo Avenue.

North of Buffalo Avenue along Veteran's Drive along the right descending bank is a capped state superfund Site, the location of a former Olin Chemical Corp Industrial Welding Site. The site was used in the 1940s and 50s to operate a research laboratory and pilot process plant. Contamination was found in the groundwater, the soil, and sediments of Gill Creek. Remediation of this site took many years but is now complete and requires continued site management, maintenance, and monitoring (NYSDEC, n.d.-c). The left descending bank in this section of the creek has a narrow riparian buffer bordered by a residential area.

The lower reach of Gill Creek has been channelized to increase water conveyance through industrial areas, including significant sections that have been lined with concrete. The lower reach has several bridge crossings including Buffalo Avenue and unnamed roads within a publicly inaccessible chemical industrial complex.

The chemical industrial complex immediately adjacent to the creek near at the mouth to the Niagara River includes parcels owned by Olin Chemical & Chlor Alkali Inc, and Dupont E I De Nemours & Company. This section of the creek is heavily industrialized, and the riparian corridor has had significant legacy contamination and subsequent remediation (NYSDEC, n.d.-d; NYSDEC, n.d.-e; NYSDEC, n.d.-f). The plant site has been a major producer of chlorine bleaches and caustic soda by Olin and its predecessors since 1897. Chlorine and caustic soda were historically produced using mercury amalgam chlor-alkali cells, however mercury is no longer used in the manufacture of chlorine. Olin also produced chlorinated organic chemicals in the past.

Gill Creek was partially remediated at this location in 1982 under a state consent order. However, contamination remained, and Olin and Dupont were under a consent order in 1991 as well. Olin and Dupont undertook a major remediation of contaminated sediments in Gill Creek in 1992, in cooperation with the NYSDEC. When the cleanup was complete, the NYSDEC stated "the single largest remaining

source of PCB contamination in the Niagara River is now history” (Buffalo News, 1993). It is BNW’s understanding that the site is currently regulated and monitored. In addition, it is BNW’s understanding that non-contact cooling water from the adjacent plants is occasionally discharged into Gill Creek near the mouth.

Finally, Gill Creek crosses under the Niagara Scenic Parkway, at the mouth of the creek. The Niagara Scenic Parkway, which opened in 1964, was constructed by Robert Moses and separated neighborhoods from the waterfront, prioritizing cars over pedestrians and bikes. There are either narrow or no riparian buffers in this section of the creek.

### Community Engagement

BNW has been working in the Gill Creek watershed for nearly a decade and has secured investments of over a million dollars to complete engagement with the community as well as restoration and reforestation projects along the creek. In 2022, BNW received funding from the Greenway Ecological Standing Committee to complete robust community, partner, and stakeholder engagement in order to identify priority areas for future projects and garner support for implementation. As part of this stakeholder engagement, BNW held open input sessions and meetings with the following groups:

1. *Local community – this includes an open public input session with residents or folks who live, work, and/or play in the Gill Creek watershed, including representatives from the Tuscarora Nation, Niagara Falls Beautification Committee, block club leaders, Niagara University, Niagara Musky Association, Buffalo Niagara River Land Trust, and Niagara County Soil and Water Conservation District.*
2. *Large landowners and other institutional stakeholders – this included engagement with representatives of the Tuscarora Nation, NYPA, Olin, City of Niagara Falls, Hyde Park Golf Course, the Town of Niagara, and the Town of Lewiston.*

Major themes/concerns regarding Gill Creek that emerged from BNW’s stakeholder engagement are as follows:

- Dumping.
- Pollution concerns – both trash and legacy contaminants.
- Creek beautification.
- Water quality and safety.
- Desire for a creek-side trail.
- A few comments that emphasized focusing restoration work on areas outside of Hyde Park too, particularly upstream.
- Dam removal and/or restoring historical fish passage to the Tuscarora Nation.
- Creating spawning habitat (sedge meadows) for Northern Pike in future living shoreline sites.
- Desire for more locally-driven efforts regarding creek restoration. Community members expressed interest in seeing momentum surround such efforts, as opposed to just one-off meeting. Some examples include potentially organizing a coalition or friends group.

See Attachment B for more details regarding information collected from the community during outreach. Please note that Attachment B only includes the discrete and standardized stakeholder feedback BNW received. In addition to the information included in Attachment B, BNW also learned a lot during informal conversations with community members during the public meeting, 1:1 meetings, and phone calls with stakeholders beyond the public meeting.

## Ecological Restoration Opportunities

### Past and Current Work

BNW is proud to continue to focus on the Gill Creek corridor as a priority location to apply projects and programs. BNW has secured over \$1.1 million in funding to restore and improve the Gill Creek corridor through the implementation of a living shoreline project over one acre in size along Hyde Park Lake in 2017; a reforestation project from 2016-2018 that engaged 682 volunteers in planting over 1,200 riparian plants and trees; and more recently through a grant from the Great Lakes Restoration Initiative to complete a green infrastructure project in an area of Hyde Park Lake that has experienced recurring harmful algae blooms. BNW uses the support of volunteers to help adaptively manage these restoration sites, while providing educational opportunities to people interested in learning about stewardship as part of the RestoreCorps Program. Since the completion of the living shoreline site in Hyde Park, led by BNW in 2017, RestoreCorps volunteers have been instrumental in keeping the restoration site on a proper path of establishment by planting native plants and seeds and managing invasive species.

Likewise, BNW monitors water quality data at four locations along Gill Creek (Gill Creek Park, Hyde Park Lake @ Veterans Memorial, Hyde Park Lake @ Robbins Road Bridge, and Gill Creek @ Isherwood Drive) as part of Riverwatch, BNW's water quality monitoring program. BNW staff train and guide a group of highly motivated volunteer private citizens to conduct professional water quality testing throughout WNY. This data is then compiled and published in a yearly Water Quality Report that is made available by print and digital download for any individual that wishes to learn more about water resources in Western New York. This report can then be used to guide restoration activities throughout the region. In addition to baseline water quality sampling, BNW also maintains a consistent presence around Hyde Park to monitor for Harmful Algal Blooms (HABS) with public safety and health in mind. When a HAB is detected, BNW communicates with NYSDEC as well as local municipalities to install educational signage to inform the public of the danger of coming into contact with affected water bodies.

BNW is also involved in many public schools around Gill Creek. For instance, BNW works closely with Niagara Falls High School (NFHS) and Niagara Wheatfield High School (NWHS) to provide place-based environmental education that connects students to the Gill Creek watershed via our Young Environmental Leaders Program (YELP). YELP is an educational and mentorship program that exposes students from environmental justice communities to issues that impact them. Upon completion of the program, participants earn college credits that will help them to satisfy degree requirements. By providing this programming BNW aims to foster stewardship, increase understanding, create advocates, and equip students with the skills, confidence, and knowledge to pursue a college degree in environmental science or a career that incorporates an environmental justice leadership role.

## Future Work

Utilizing community and stakeholder feedback received during this planning process, previous feedback, and BNW staff knowledge of Gill Creek conditions (from years of working along the creek and similarly impaired waterways, and our review of existing planning documents in the creek corridor), BNW identified opportunities for future work along the corridor. The potential projects are those we believe are feasible for BNW and other partners to work with willing landowners on in order to address the major concerns and hopes that came up during conversations with community members. Attachment C includes a map that provides a visual overview of restoration, public access, trail connections, and community outreach opportunities. Table 1 refines that information with the top priority projects identified during this project.

Table 1.

Potential Project	Municipality	Notes
Restoration along NYPA Reservoir	Town of Lewiston	<ul style="list-style-type: none"> <li>This part of the creek is severely impaired (low flow, invasive species, loss of habitat, channelized) with lots of opportunity for restoration.</li> <li>During a 2023 stakeholder meeting with NYPA they said they are not opposed to restoration projects in this area. NYPA would have to hear very specific restoration ideas in order to comment further on feasibility.</li> </ul>
Revisit agreement regarding NYPA Reservoir flow augmentation to Gill Creek to potentially find more ecologically friendly ways to manage water inputs	Geographically – Town of Lewiston	<ul style="list-style-type: none"> <li>The NYPA Reservoir flow augmentation was originally managed via an agreement between NYPA and Niagara County. It remains unclear who has responsibility for controlling the inputs to Gill Creek.</li> <li>Opportunities exist to adopt more ecologically friendly and proactive management practices of this water source. This includes increasing the inputs during peak algae bloom season to reduce the occurrence and/or shorten the duration of HABs within Gill Creek and Hyde Park Lake.</li> </ul>
Restoration of East Branch Gill Creek near Saunders Settlement Rd	Town of Lewiston	<ul style="list-style-type: none"> <li>Water quality of this tributary was brought up during the March 2023 public meeting.</li> </ul>
Foster stewardship among landowners along Hewitt Drive and N Brookside Drive	Town of Lewiston	<ul style="list-style-type: none"> <li>Gill Creek flows behind houses in this residential neighborhood between these streets.</li> <li>There is an opportunity for more targeted outreach to this specific neighborhood to provide land management education for homeowners.</li> <li>Need for e. coli sampling in these locations to confirm historical sewage dumping and discharge has been addressed.</li> </ul>
Daylighting Gill Creek in Reservoir State Park	Town of Lewiston/ Town of Niagara border	<ul style="list-style-type: none"> <li>Gill Creek is buried under Reservoir State Park between Saunders Settlement Road and Military Road. According to the NYS Office of Parks, Recreation and Historic Preservation (OPRHP), the NYS Department of Transportation is completing their reinstallation of the culvert at/near the park in the near future. OPRHP is considering completing this project.</li> </ul>
Foster stewardship among landowners along Witmer Industrial Estates, Isherwood Drive, Creekside Parkway, Chester Ave, Liberty Ave, Pomeroy Ave, and Fox Ave	Town of Niagara	<ul style="list-style-type: none"> <li>Gill Creek flows behind houses and businesses along these streets</li> <li>There is opportunity for more targeted outreach to this specific neighborhood to provide land management education for landowners</li> </ul>

Potential Project	Municipality	Notes
Restoration of East Branch Gill Creek behind houses on N Whitham Drive and Dell Drive	Town of Niagara	<ul style="list-style-type: none"> <li>Gill Creek flows behind houses along these streets.</li> <li>There is an opportunity to utilize nature-based practices to revitalize shoreline habitat for the benefit of fish, wildlife, and the surrounding community. Public access could be incorporated into these areas via informal overlook areas, trails, and signage.</li> <li>There is opportunity for more targeted outreach to this specific neighborhood to provide land management education for landowners.</li> </ul>
Plant more trees on Seneca Ave	City of Niagara Falls	<ul style="list-style-type: none"> <li>Identified via 2023 Gill Creek community survey responses</li> </ul>
Remediation and dam removal of settling pond north of Hyde Park Golf Course	City of Niagara Falls	<ul style="list-style-type: none"> <li>Potential to address community concerns about contamination/pollution that were brought up via 2023 Gill Creek community survey responses.</li> <li>During the development of BNW's (at the time, Buffalo Niagara Riverkeeper's) Niagara River Greenway Habitat Conservation Strategy, BNW noted conversations with representatives from Niagara Falls also expressed concern over a small pond located at northern edge of the park which is a popular fishing spot. There are contamination concerns with the pond, and it may also be a source of invasive species and sediment.</li> </ul>
Restoration along Gill Creek within the Hyde Park Golf Course	City of Niagara Falls	<ul style="list-style-type: none"> <li>The main takeaways from the stakeholder meeting with Rick Horn, Hyde Park Golf Course Manager, in April 2023 are as follows: Golf course has taken a nearly 40-acre area out of play and no longer maintains the area with mowing. There is opportunity for enhancements in this area, such as establishing new park trees in mowed lawn areas, extensive reforestation plantings, and/or larger scale pollinator meadow creation with mowed trails. Additionally, along several riparian areas in the golf course there are many dead ash trees (due to the emerald ash borer), making reforestation a high priority for safety, erosion control, and overall creek health. Riparian trees and shrubs could be planted along the creek within defined no-mow areas. Finally, the golf course experiences flooding in several locations and there could be opportunities for mutually beneficial projects that improve habitat and reduce flooding.</li> </ul>
Hyde Park Lake – Duck Island	City of Niagara Falls	<ul style="list-style-type: none"> <li>This area was mentioned many times during stakeholder conversations. It is a very popular part of the park that is in need of improvement. In particular, this area experiences a greater amount of HABs than any other location documented by BNW. Likewise, the shoreline is very eroded.</li> <li>During conversations with the City of Niagara Falls, this area is a priority for them as well. Duck Island proper may receive improvements via upcoming projects but the adjacent mainland shoreline could also use shoreline stabilization and restoration.</li> <li>This project was selected as a future "Living Shoreline" revitalization area, based on conversations with the City of Niagara Falls. Design solutions will utilize similar techniques used at the existing living shoreline sites in Hyde Park to create a gradual transition between land and water capable of supporting diverse native plants. Public access will be incorporated into these areas via informal fishing access, trails, and signage. Refer to enlargement plans for more information – Attachment D.</li> </ul>

Potential Project	Municipality	Notes
Hyde Park Lake – West Bank between Skate Park and Robbins Rd Bridge	City of Niagara Falls	<ul style="list-style-type: none"> <li>This area is across from Gaskill Preparatory School. There is currently a boardwalk that is used for fishing and to access water that has deteriorated over time. During stakeholder conversations this boardwalk was brought up as something the community would like to see revitalized.</li> <li>There is also an informal kayak launch/ fishing area near Robbins Rd. bridge that could be improved.</li> <li>The shoreline is currently very eroded and in need of improved habitat and community access.</li> <li>This project was selected as a future “Living Shoreline” revitalization area, based on conversations with the City of Niagara Falls. Design solutions will utilize similar techniques used at the existing living shoreline sites in Hyde Park to create a gradual transition between land and water capable of supporting diverse native plants. Public access will be incorporated into these areas via informal fishing access, trails, and signage. Refer to enlargement plans for more information – Attachment D.</li> </ul>
Hyde Park Lake – Extension of Previous Living Shoreline Project	City of Niagara Falls	<ul style="list-style-type: none"> <li>This area is adjacent to BNW’s 2017 Living Shoreline project in Hyde Park Lake. There is a clear need to replicate and expand success farther along the shoreline. Design solutions could utilize similar techniques used at the existing living shoreline sites in Hyde Park to create a gradual transition between land and water capable of supporting diverse native plants. Public access could be incorporated into these areas via informal fishing access, trails, and signage.</li> </ul>
Hyde Park Lake – Fishing Pier	City of Niagara Falls	<ul style="list-style-type: none"> <li>Existing fishing pier, although BNW has observed more people fishing below the Hyde Park Lake dam than this pier.</li> <li>Opportunity to improve safety and access by replacing existing pier in addition to shoreline restoration.</li> </ul>
Hyde Park Lake Dam	City of Niagara Falls	<ul style="list-style-type: none"> <li>The dam is just upstream of Pine Avenue and provides a significant barrier to any fish movement upstream from the river.</li> <li>BNW recommends exploring opportunities for addressing fish passage in this location as long as commination or other potential concerns are ruled out.</li> </ul>
Small dam upstream of Walnut Ave	City of Niagara Falls	<ul style="list-style-type: none"> <li>A small dam, approximately two feet high.</li> <li>Acts as a barrier to fish movement during summer low flow condition.</li> <li>Opportunity to remove dam and improve fish passage.</li> </ul>
520 Hyde Park Blvd	City of Niagara Falls	<ul style="list-style-type: none"> <li>Abandoned property owned by City of Niagara Falls.</li> <li>Directly adjacent to Gill Creek and within the mapped floodplain (brought up by stakeholders during 2023 public engagement).</li> <li>Opportunity to demolish building and reclaim floodplain. BNW recommends considering the creek when redeveloping this property to work with nature, instead of against it.</li> </ul>
Veterans Drive	City of Niagara Falls	<ul style="list-style-type: none"> <li>BNW learned from stakeholders during 2023 engagement that this is a big area for dumping. The creek is adjacent Veteran’s Drive, there is woody vegetation along the shoreline, and not a lot of residents or activity on the western side of the creek. In addition, across Veteran’s Drive is the capped Olin Chemical Corp Industrial Welding remediation site. Legacy contaminants constrain remediation in this location.</li> <li>Opportunity to create a loop path here that connects the western side of the creek (along Veteran’s Drive) with adjacent neighborhoods on the eastern side of the creek. This pathway</li> </ul>

Potential Project	Municipality	Notes
		<p>could extend from Gill Creek Park. BNW recommends installing benches and/ or fishing access to also bring “more eyes” to the area and deter dumping.</p> <ul style="list-style-type: none"> <li>The City of Niagara Falls expressed interest in a loop trail here and such a project could be a combination of remediation, shoreline restoration, and public access. BNW recommends engaging with the Echota Block Club and the Olin Community Advisory Panel if a project is pursued.</li> </ul>

Next, BNW collaborated closely with willing landowners to discuss which of the potential projects were most likely to be feasible and aligned best with their priorities. We landed on three “best bet” projects for near term implementation. These three projects (Duck Island and the West Bank Sites A and B [between the Skate Park and Robbins Rd Bridge]) are large living shoreline restoration sites along Hyde Park Lake that could potentially be broken up into several smaller projects. See Attachment D for these three “best bets” project concepts. BNW estimated roughly what the total cost to implement each of these three project concepts would be. See below for rough cost estimates from BNW. These costs are comprehensive and include design, construction, and BNW personnel to administer this project.

- Duck Island - \$950,000
- West Bank Site A - \$830,000
- West Bank Site B - \$660,000

**Conclusion and Next Steps**

The Gill Creek Conceptual Restoration Plan demonstrates a community vision for Gill Creek as a healthy, natural waterway, with public access, recreation opportunities, and healthy natural communities and fish and wildlife populations. Restoration of Gill Creek will require a robust, long-term strategy at the local, state, and federal level. The Gill Creek Conceptual Restoration Plan aims to function as a guiding resource and starting place to achieve this long-term vision. The Gill Creek Conceptual Restoration Plan is of course a conceptual plan, but also an invitation to watershed stakeholders for continued involvement and action. BNW will continue to prioritize Gill Creek for our restoration projects and programs and implement on-the-ground restoration projects as we are able. However, holistic implementation requires the interest and motivation of a suite of watershed stakeholders. Sustained action, particularly continued community input and landowner interest and cooperation, is needed. Beyond on-the-ground restoration projects, there is a need for adaptive management, community cleanups, and the creation of a local coalition between watershed residents, community organizations, schools, and government agencies. In particular, a coalition could be an effective mechanism for building interest and motivation in Gill Creek restoration and ensuring that holistic watershed restoration projects are achieved and sustained.

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# **Attachment A – Figures**



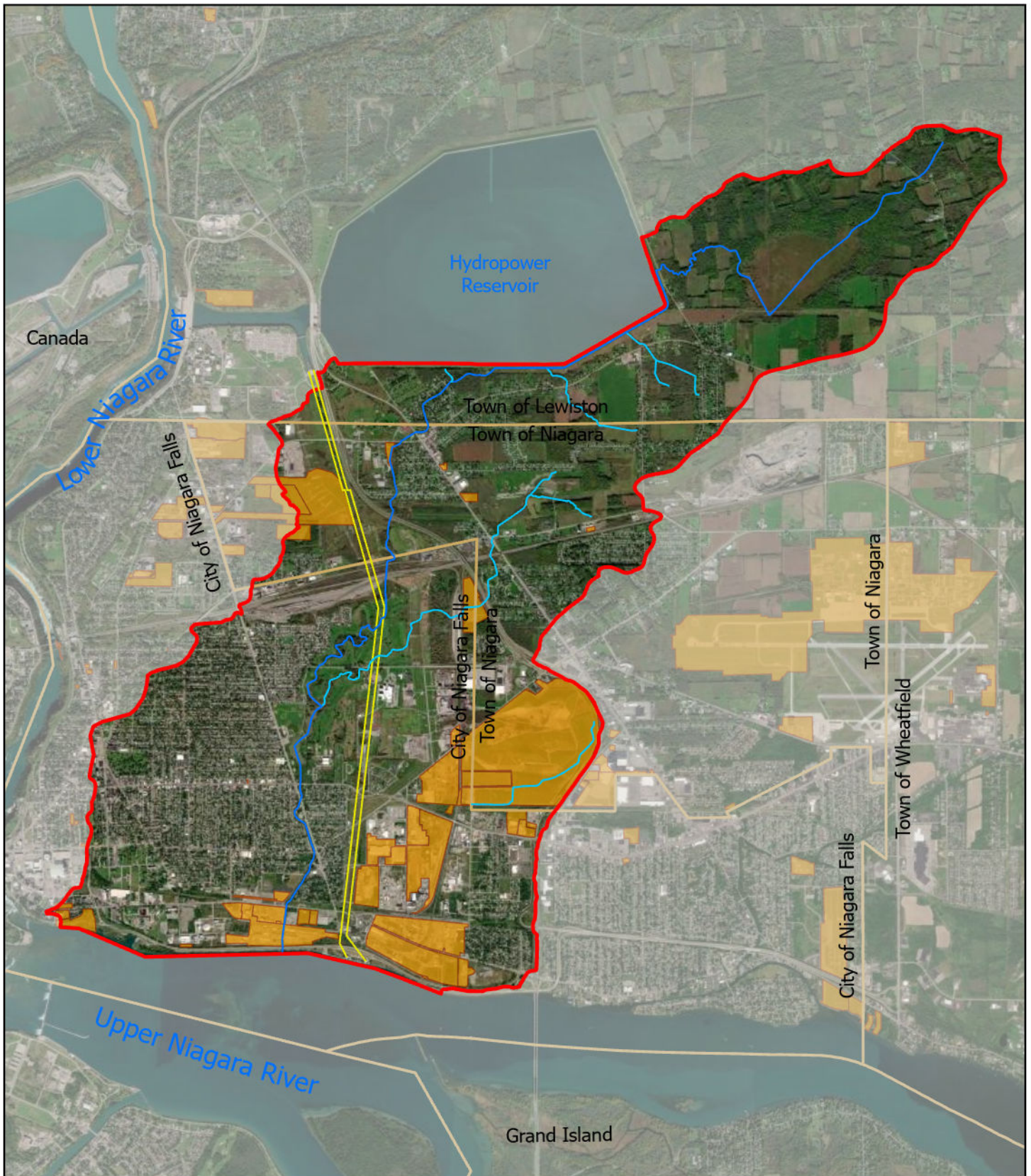
# Gill Creek Conceptual Restoration Plan

Watershed Location



- Gill Creek
- Tributary
- NYPA Conduit
- Gill Creek Watershed
- Municipal Boundary





# Gill Creek Conceptual Restoration Plan

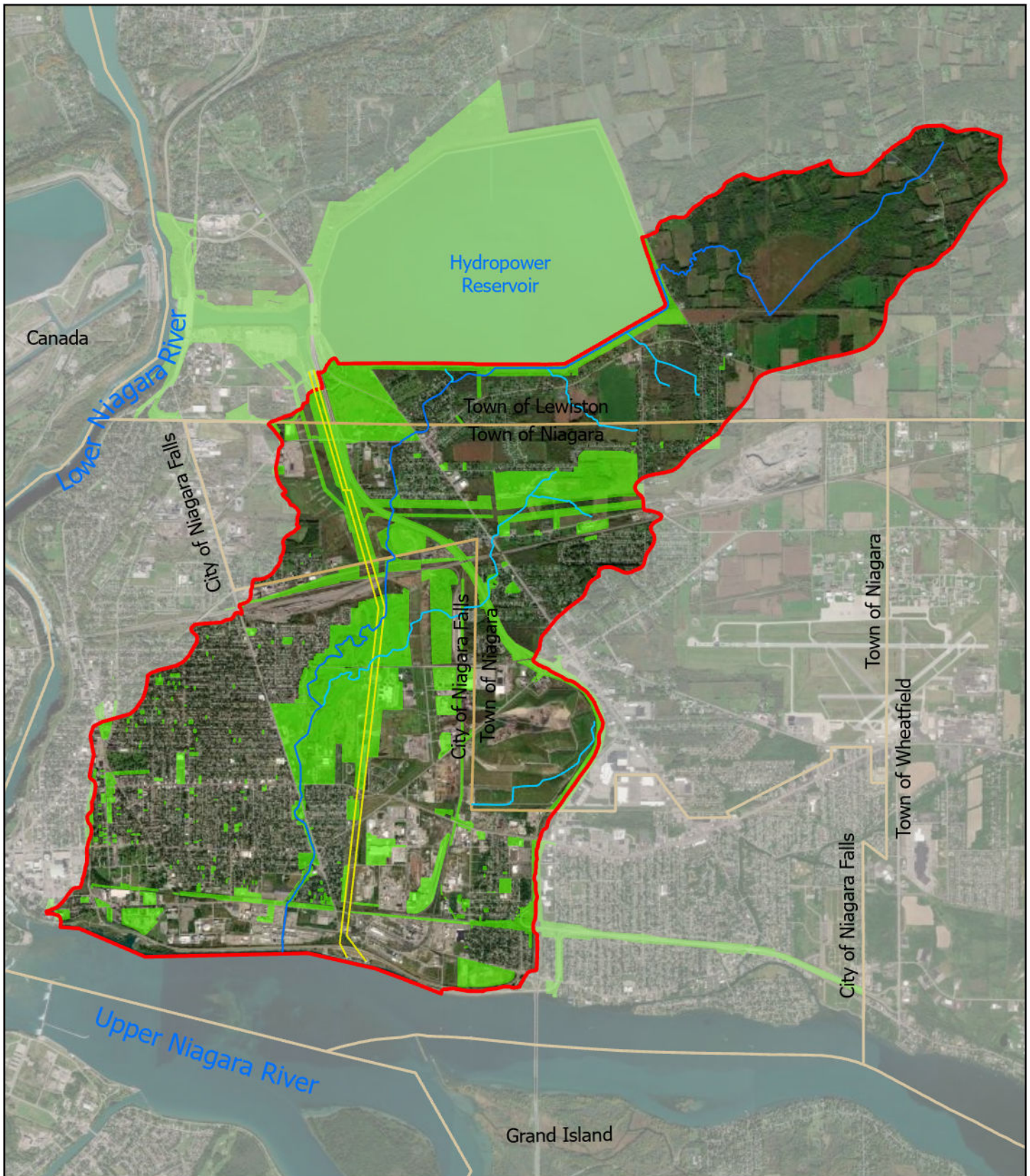
Remediation Sites



- Gill Creek
- Tributary
- NYPA Conduit
- NYSDEC Remediation Site
- Gill Creek Watershed
- Municipal Boundary



0.5 0 0.5 Miles



# Gill Creek Conceptual Restoration Plan

Potentially Publicly Owned Parcels

- Gill Creek
- Tributary
- NYPA Conduit
- Potentially Publicly Owned Parcels
- Gill Creek Watershed
- Municipal Boundary



**Attachment B –  
Community Engagement  
Results**

*Results from Gill Creek  
Community Feedback Online  
Survey*

How do you engage with Gill Creek?	How do you access/where do you notice Gill Creek (i.e., at Hyde Park golf course, in your neighborhood, while driving along the reservoir). Feel free to include more than one location. Please be as specific as possible.	What problems do you notice along the creek (i.e., dumping, pollution, algae blooms, erosion, lack of access, channelized, buried)? Where do you notice these problems? Please explain.	Dream big: what solutions and projects could you envision along Gill Creek? Please explain and include locations.	Optional question: Are there other services and programs along Gill Creek would you like to see?	Optional question: BNW has completed a riparian reforestation project and a living shoreline project along Gill Creek. Are you familiar with these projects? If so, please provide any feedback on these completed projects.	Optional question: Please share any additional stories, comments, or observations you may have about Gill Creek. We greatly appreciate any insights you are willing to share. If applicable, please remember to include where specifically along the creek you are referring to.	Optional question: where do you live? (This question helps us understand if we are reaching folks who live/work/play near the creek. If you previously lived near the creek and currently do not, or if you work or recreate along the creek, feel free to describe that in the "Other" option.)
Lived in the area in the 60's	Fox Ave Town of Niagara	Witnessed dumping in the 60's behind what was a drive in theater.	Just clean it up		No		I lived on Fox Ave in the Town of Niagara
Walk by creek, Bocce on Wednesday night	In Hyde Park	Pollution, dumping. On some days it gives a bad smell like a musty cellar.	A boardwalk from the bridge to the veterans memorial and a place for mini golf on the skate park side.	Educational programs, Stewardship activities, Community events, Amenities such as kayak launch or fishing pier, "Friends of Gill Creek" group	I am not very familiar, I would hope the cesspool by the golf course is cleaned and a pump installed to prevent stagnation	Hyde Park is an undervalued resource and cleaning up the water would be a great start in realizing it's value.	Lewiston
Birdwatching, Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing), cleaning up garbage and fallen branches	along creek between falls street and buffalo ave.	large amount of dumping of tires and household building materials dumped a lot along veterans drive midway between falls street and buffalo ave. large amount of debris dammed up under the over passes of falls street and buffalo ave restricting flow in spots, hard to access creek in spots along creek due to thick over growth of foliage. over growth of lilly like pads along creek from falls st. to buffalo ave hinders fishing here many fisherman have complained to our block club.	from falls street and buffalo ave i would like to see the access to the creek cleared up while still maintaining the beauty of the plants and trees. a public walking path would be great with some benches to sit and enjoy nature. planting perennials that flower to attract the birds bees and butterflies would be wonderful, cameras to catch the people who keep dumping along the creek	Educational programs, Stewardship activities, Community events, "Friends of Gill Creek" group	i love the wild flowers along area near the rose garden along the lake		City of Niagara Falls
Walk by creek Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	neighborhood, golf course, running	no kayak launch and access to safe fishing areas is limited	Gill Creek is in desperate need of a Kayak launch. In 2019 the City of Niagara Falls held an event for kids which included kayaking, fishing and other activities. Because there is no launch we had volunteers manually put kayaks in and pull them out. They kayaking was free and the line of kids was non-stop all day. It is something that is very important to this area.	Community events, "Friends of Gill Creek" group			City of Niagara Falls
Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	Neighborhood	Very dirty. Trash etc	Start with water analysis	Educational programs, Amenities such as kayak launch or fishing pier			City of Niagara Falls
Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing), Magnet Fishing	Usually along the area near Duck Island.	Algae, garbage, fishing line and hooks, dumping. A lot of this is around the duck island area as well as up near the golf course and along the entire shore.	I'd like to see a clean up of the water and shore line and maybe a dredging of the bottom to collect the huge amount of submerged garbage.	Stewardship activities, Community events, Amenities such as kayak launch or fishing pier, "Friends of Gill Creek" group, Renovation of Duck Island for community events.	I am not familiar with the work, but would like to know where to see it.	Please reach out anytime to see if there is something our two groups can do together. James 716-316-2464, Niagara Beautification Commission	City of Niagara Falls
Birdwatching, Walk by creek, Planting - interested in invasive removal	Garlow Rd - Tuscarora Territory, Reservoir State Park, Hyde Park, Veteran's Blvd bordering Gill Creek	Lack of access from Reservoir State Park to Hyde Park, also numerous instances of environmental damage	Creekside trail. Many, many challenges, I know	Stewardship activities	completed? I guess you can dream...	the portion of the creek above the golf course has received almost no attention but environmentally its the most in need of protection	
Fish, Walk by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	Hyde Park, Reservoir Park, Isherwood Drive	Dumping, garbage, fishing line, Hyde Park - more trash cans? Garbage and plastic bottles south of Hyde Park. Shallow between Lockport Rd and the Reservoir	fishing docks in Hyde Park, deepen/widen north end for kayaking, pedestrian trail along creek	Community events, Amenities such as kayak launch or fishing pier			

How do you engage with Gill Creek?	How do you access/where do you notice Gill Creek (i.e., at Hyde Park golf course, in your neighborhood, while driving along the reservoir). Feel free to include more than one location. Please be as specific as possible.	What problems do you notice along the creek (i.e., dumping, pollution, algae blooms, erosion, lack of access, channelized, buried)? Where do you notice these problems? Please explain.	Dream big: what solutions and projects could you envision along Gill Creek? Please explain and include locations.	Optional question: Are there other services and programs along Gill Creek would you like to see?	Optional question: BNW has completed a riparian reforestation project and a living shoreline project along Gill Creek. Are you familiar with these projects? If so, please provide any feedback on these completed projects.	Optional question: Please share any additional stories, comments, or observations you may have about Gill Creek. We greatly appreciate any insights you are willing to share. If applicable, please remember to include where specifically along the creek you are referring to.	Optional question: where do you live? (This question helps us understand if we are reaching folks who live/work/play near the creek. If you previously lived near the creek and currently do not, or if you work or recreate along the creek, feel free to describe that in the "Other" option.)
Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	Around Buffalo Ave and at outlet to Niagara River	Dumping - tires, trash, etc	Community clean up	Educational programs, Stewardship activities, Community events	Not familiar		
Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing). Passively observe in neighborhood and park	One of Gill Creek's parks is 1/4 of a mile away from our house. My family homeschools so in nice weather we visit the park and play basketball, baseball, and/or football for physical education	Around the park is the occasional gum wrapper, water bottle, bottle cap, or other piece of trash. Not too much given other certain parks but could be nicer (in Gill Creek Park on Niagara Street)	--				
Fish, Birdwatching, Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	Hyde Park and my home on Miller Rd	pollution	100% cleaned	Community events, Amenities such as kayak launch or fishing pier	not familiar	I remember in the 1970s Hyde Park lake had a major dredging project	
Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	corner of Hyde Park Blvd and Niagara St	Trash at Hyde Park Blvd and Niagara St	Gill Creek trail or a trail or route that goes from one end to the other		I saw people planting trees and have observed these trees for the past few years. I am happy about that type of project.	Our family enjoys watching 4th of July fireworks by the water. I didn't know the creek was so long. I [can't read handwriting] on the water.	
Fish, Kayaking	I haven't actually been around Gill Creek before I work at the Aquarium of Niagara. In our free time, my husband and I like to hike, fish and kayak, any local waterway is important to us for clean water initiatives, for health and the environmental health.	--	walking trails, kayak launch sites, areas for wildlife refuge (bird houses, nests)	Community events, Amenities such as kayak launch or fishing pier		I have not experienced Gill Creek specifically but I do love many other nature reserves, bird watching areas, and education centers	
Fish	I have never been at Hyde Park. I usually fish at Artpark in Lewiston	I saw a lot of metals under the Artpark River. My wader was torn from metals under the water.	--	Amenities such as kayak launch or fishing pier			
Birdwatching, Walk by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	Driving and walking through since I live nearby	Algal blooms, lack of access - no boat or kayak launch throughout.	Kayak launch and easy access throughout the entire creek (north to south). Issue would be w the dam but this could be an opportunity for portage.	Community events, Amenities such as kayak launch or fishing pier	Yes, I read the signs as I was walking along the shoreline. But it would be nice to see these signs near walkways.	This is a very large and popular park that is used by many residents. Keep up the good work and thank you for caring!	
Fish, used to have fishing derbies, water was clearer, bass, sunfish, catfish	Little Niagara River, boating, catching dragonflies	empty water bottles, sewer debris	need millions of dollars to clean it up, want to eat fish out of there comfortable, dredging			pollution, public meeting with time to speak	
Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing), used to fish and catch soft shell crabs	Hyde Park all the way to the river	Too many. Rats, weeds, garbage	Bring back the fish, crabs, be able to walk in the water	Community events, Amenities such as kayak launch or fishing pier	No not yet. But can't wait to get involved. Love to help	Going with my family to get soft shell crabs for fishing, chasing fish in the water behind the old police department and running threw tunnels. So amazing having clean water. And beautiful wild life.	
Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	Gill Creek Park, Hyde Park Blvd - Pine Ave, Veteran's Monument	Dumping by Veteran's drive, algae blooms, lack of access - over grown trees & weeds - Hyde Park Blvd and Niagara St to Walnut Ave	Kayaking, paddle boats, clean fishing	Educational programs, Community events, Amenities such as kayak launch or fishing pier	No		
Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	at Hyde Park golf course and playground	garbage, trash, lack of access because I never even knew it was there	Projects to clean up the trash and prevent more from being thrown in there. More walking trails.	Community events, Amenities such as kayak launch or fishing pier	No I've never heard of these projects, maybe a little from Buffalo Water Keepers	I would like to see more activities there to visit it more often	

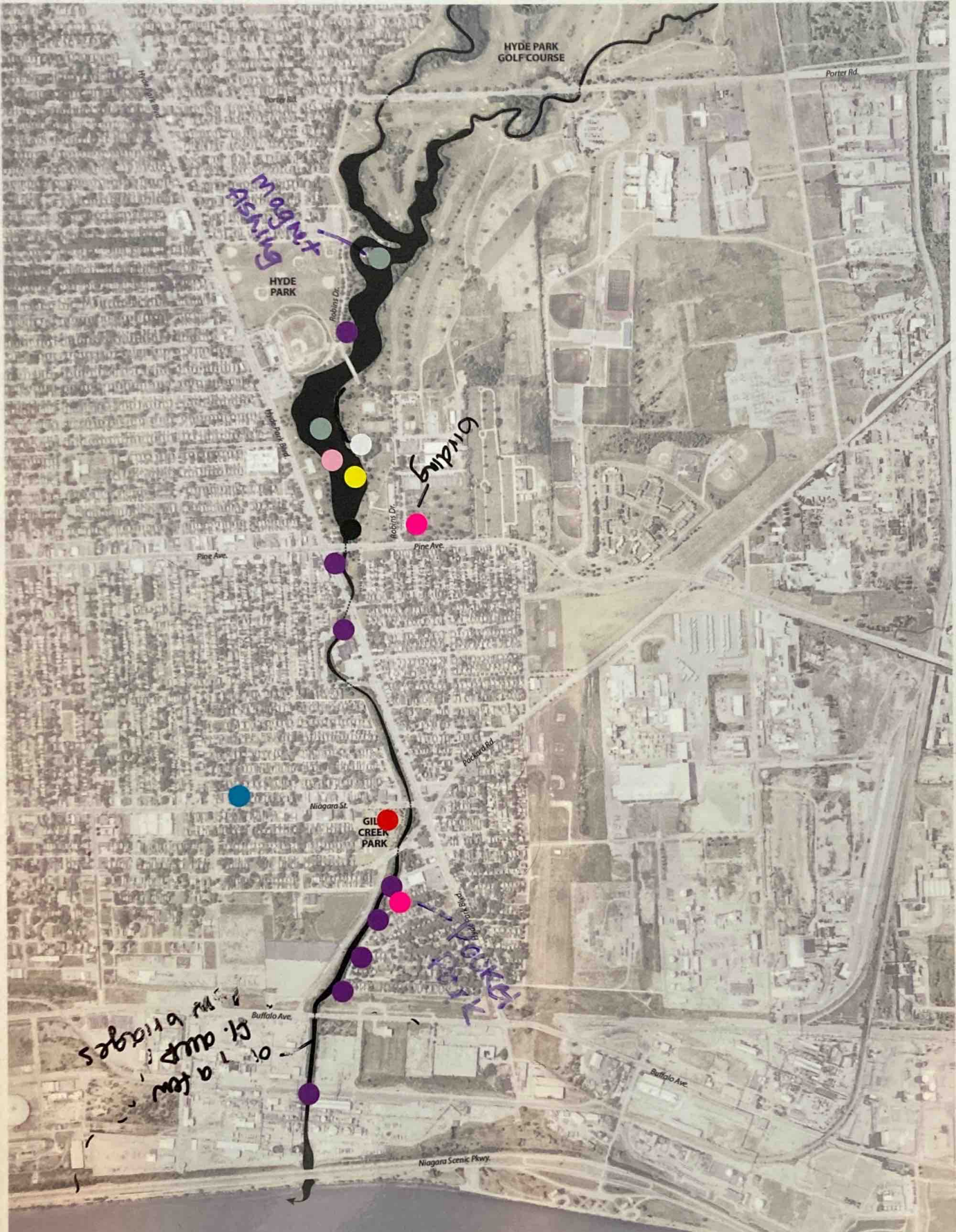


How do you engage with Gill Creek?	How do you access/where do you notice Gill Creek (i.e., at Hyde Park golf course, in your neighborhood, while driving along the reservoir). Feel free to include more than one location. Please be as specific as possible.	What problems do you notice along the creek (i.e., dumping, pollution, algae blooms, erosion, lack of access, channelized, buried)? Where do you notice these problems? Please explain.	Dream big: what solutions and projects could you envision along Gill Creek? Please explain and include locations.	Optional question: Are there other services and programs along Gill Creek would you like to see?	Optional question: BNW has completed a riparian reforestation project and a living shoreline project along Gill Creek. Are you familiar with these projects? If so, please provide any feedback on these completed projects.	Optional question: Please share any additional stories, comments, or observations you may have about Gill Creek. We greatly appreciate any insights you are willing to share. If applicable, please remember to include where specifically along the creek you are referring to.	Optional question: where do you live? (This question helps us understand if we are reaching folks who live/work/play near the creek. If you previously lived near the creek and currently do not, or if you work or recreate along the creek, feel free to describe that in the "Other" option.)
Walk by creek	at Hyde Park across from Gaskill	Pollution and garbage along the grass and water	I'd imagine more plantings and flowers. Maybe some restorations to clean up pollution and projects to attract more wildlife * Duck feeding station (free)	Community events, Amenities such as kayak launch or fishing pier, maybe tables for people (picnics)	I'm not too sure. I just learned about this stuff today. Should be more well known to inform others to want to help & be involved.	I just visited the creek for the first time today but I wouldn't mind going back.	
Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	I notice it at the parks and different areas it flows through. I see it mainly at Hyde Park.	There is a lot of garbage along the edge of the creek. These problems are especially at Hyde Park.	I envision a well kept and clean area along Gill Creek. Different recreational areas could also be good around Gill Creek.	Educational programs, Stewardship activities, Community events, Amenities such as kayak launch or fishing pier	No I am not familiar	I went there at Hyde Park with Buffalo Niagara Waterkeepers to see the shoreline and pathway	
Fish, Walk by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	At Hyde Park across from Gaskill Prep	Littering, plastic pollution, garbage in water /on land	Pickleball courts, basketball courts, gazebos, more garbage cans/recycling, walking trails	Community events	Not familiar	I like fishing there, nice place to walk/run	
Fish, Birdwatching, Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	At the Hyde Park and the Duck Island	Just a lot of pollution and unpleasing sights more disposable place	More walkways and places to sit and watch and take while reading and eating	Community events, Amenities such as kayak launch or fishing pier	Not really familiar with them	Bird/duck feeding posts and a fall clean of Duck Island	
Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	I can drive, walk, or bike on Hyde Park and Linwood Ave - even driving around I notice Gill Creek	A lot of pollution and trash, especially near or even in the water sources	Restoration of walking trails, water kayak launch, more plants, adaptable for the environment, nicer parks restrooms, gardens where people can see	Educational programs, Community events, Amenities such as kayak launch or fishing pier	I am not. Buffalo Water Keepers has told me about some of their newer projects but that's only because I know and work with them actively. It should be more well known!	I am never in Gill Creek much but I think its a beautiful foundation that has so much potential to be magnificent.	
Birdwatching, Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	I can walk or drive - I live a few blocks away. I go to the area near that tan bridge near Linwood Ave. I also see the reservoir while driving to Lewiston.	Lots of garbage/pollution. Kind of hard to access all the different areas because you have to drive separately - you can't walk. Right near roads - loud. Reservoir hill where people sled - nothing really talking about Tuscarora Nation/bringing awareness to stolen lands. Walking trails.	Fines for littering/garbage cans. Kayak launch. Photo opp.? - to bring more people - places for pics for ex. prom ? Something for kids to keep people going. flowers/ more plants in general. Walking trails. Duck food so people don't feed them bread. Plant more trees on Seneca Ave!	Community events, Amenities such as kayak launch or fishing pier	Somewhat. Duck box is cool. I wish people didn't leave so much trash.	Lots of trees/vegetation. Places for wildlife. Hyde Park.	
Walk by creek	I notice Gill Creek by my house and by my brother's school.	I notice lots of garbage by the banks of the creek	More plants or trees that could shield the creek from runoff as well as more accessible trash cans.	Educational programs	I am not super familiar with these projects		
Walk by creek, Sit by creek, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	Hyde Park Lake by Niagara Falls High School	Pollution, garbage, overfishing, trees cut down. It's most noticeable from the land around the lake.	Garbage pick up, cleaning, protests	Stewardship activities, Community events, Amenities such as kayak launch or fishing pier	No		
Fish, Walk by creek, Sit by creek	Hyde Park and I used to live in Hyde Park area so I used to walk to the creek a lot and feed geese	A lot of litter, pollution	community litter clean ups, kayak launch, better restrooms, garden with flowers	Amenities such as kayak launch or fishing pier	not familiar		
Kayaking, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	in Hyde Park, driving by, it's in front of the high school so every time I drive in	garbage, I picked up half a bag full just by walking on the trail	add garbage and recycling bins around the park, make paths more obvious and better, launch gaga ball photo opps place, restrooms	Educational programs, Community events, Amenities such as kayak launch or fishing pier	yes I saw Gill Creek today and it looked good but it was kind of when cayuga same thing	I think making these areas more well known would people care more or an area to take pictures would help get the whole community involved. Fishing doc with flower/vine arch.	
Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	Hyde Park	littering on the shore	--	less grass more varied plants	They've created the prettiest part of Hyde Park		

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Walk by creek	I live very close to Gill Creek so I see it all the time	I see a lot of garbage and litter. We can get that cleaned up with some volunteer work.	A group of people cleaning up the garbage	Amenities such as kayak launch or fishing pier	No I'm not familiar with the projects	A better kayak launch and more fish in the water	
Walk by creek	while driving along	garbage	better lunches more sporting things to do	Community events	No		
Walk by creek	I walk to it and drive by it	There is some garbage/pollution	Clean up the creek and bring more [can't read handwriting] to it	Amenities such as kayak launch or fishing pier	No		
Fish, Passively observing creek during other activity (i.e., in neighborhood, in a park, driving by, golfing)	While driving or if im going there to attempt to fish	The creek water is very dirty , its not accessible in most parts, including hyde park so much dump & pollution in water its sad to see the fish have to live in that water .	I wish creek / hyde park lake could be drained & cleaned from all dump & pollutant to make fish have better living environment & also so locals have a place to fish . High grass need to be cut so that there are more accessible fishing spots				City of Niagara Falls

# *Results from Gill Creek Community Meeting Interactive Maps*

- *Map #1 – Where do you like to recreate?*
- *Map #2 – What impairments do you notice?*
- *Map #3 – What solutions can you imagine / what projects would you like to see?*



HYDE PARK GOLF COURSE

Porter Rd.

Magnet Fishing

HYDE PARK

Birding

GIL CREEK PARK

SITTING BUCKETS

St. Paul's a few miles away

< NIAGARA RIVER

MAP TITLE:

HYDROPOWER  
RESERVOIR

RESERVOIR  
STATE  
PARK

TOWN OF LEWISTON  
TOWN OF NIAGARA

VETERANS'  
MEMORIAL  
PARK

TOWN OF NIAGARA  
CITY OF NIAGARA FALLS

HYDE PARK  
GOLF COURSE

HYDE PARK  
GOLF COURSE

MAP TITLE:



Kay

### Where do you recreate?

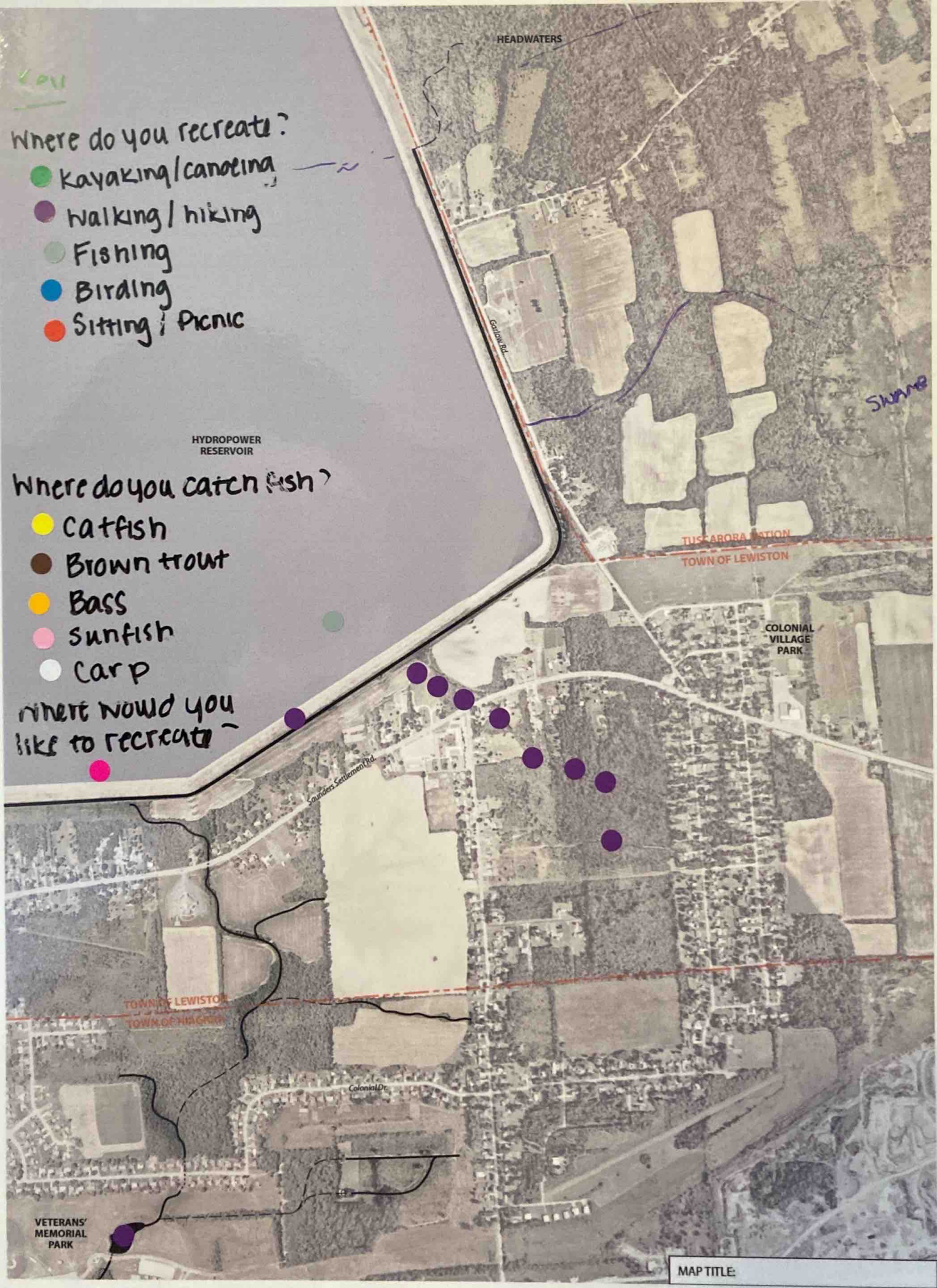
- Kayaking/canoeing
- Walking/hiking
- Fishing
- Birding
- Sitting/Picnic

### Where do you catch fish?

- Catfish
- Brown trout
- Bass
- Sunfish
- Carp

### Where would you like to recreate?

●



HYDROPOWER  
RESERVOIR

RESERVOIR  
STATE  
PARK

TOWN OF LEWISTON  
TOWN OF NIAGARA

Sounders Settlement Rd.

Sounders Settlement Rd.

Milroy Rd.

VETERANS'  
MEMORIAL  
PARK

I-190

Lockport Rd.

TOWN OF NIAGARA  
CITY OF NIAGARA FALLS

Lockport Rd.

Milroy Rd.

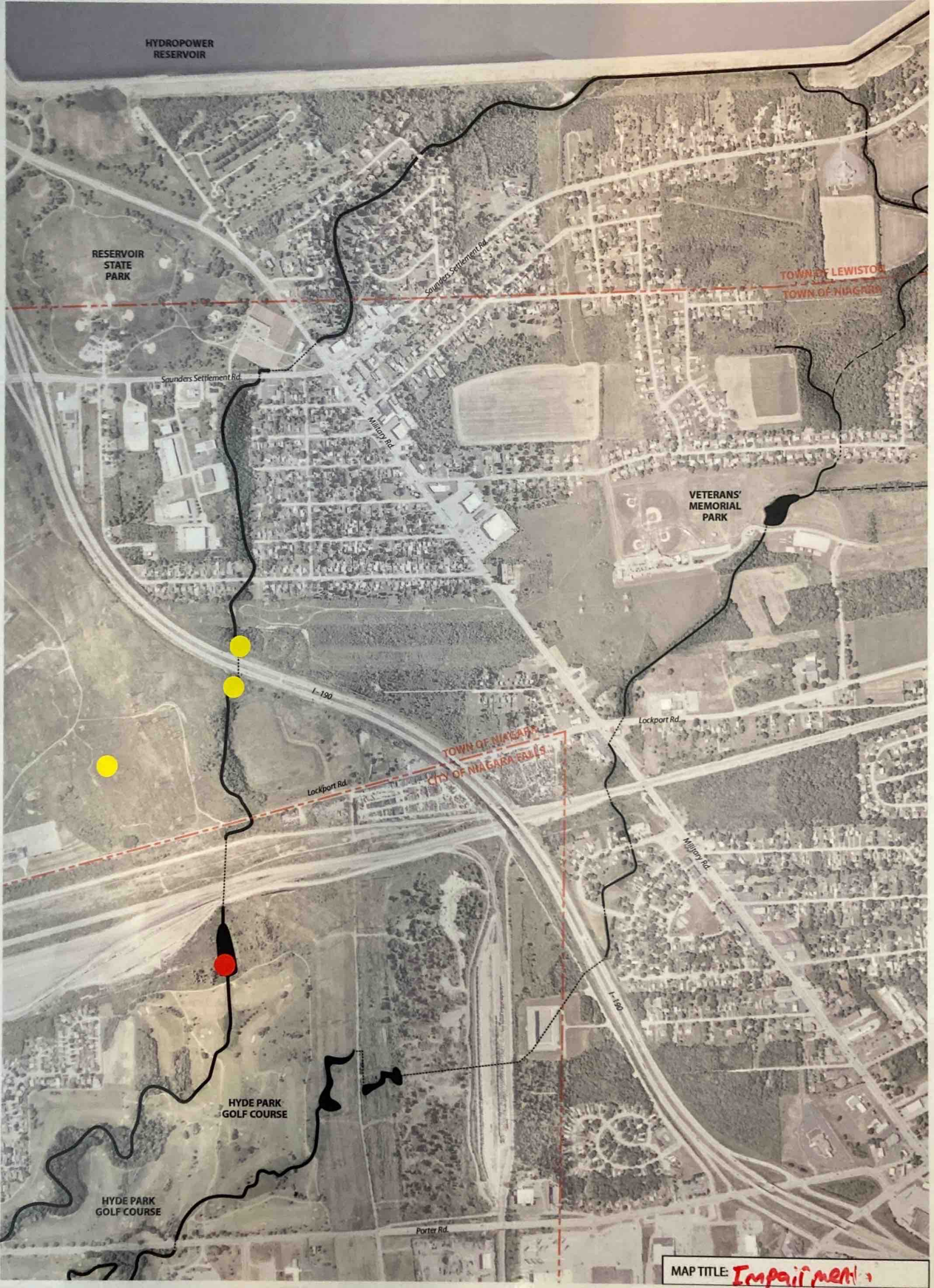
I-190

HYDE PARK  
GOLF COURSE

HYDE PARK  
GOLF COURSE

Porter Rd.

MAP TITLE: *Impairment*





HYDE PARK GOLF COURSE

Porter Rd.

Porter Rd.

HYDE PARK

Robins Dr.

Robins Dr.

Robins Dr.

Pine Ave.

Pine Ave.

YOU  
X ARE  
HERE!

Packard Rd.

Niagara St.

GILL CREEK PARK

Robins Dr.

Buffalo Ave.

Buffalo Ave.

Niagara Scenic Pkwy.

< NIAGARA RIVER

MAP TITLE *Impairment's*



**Key**

- Pollution / Runoff
- Harmful Algal Blooms
- Access

HEADWATERS

HYDROPOWER RESERVOIR

TUSCARORA NATION  
TOWN OF LEWISTON

COLONIAL VILLAGE PARK

TOWN OF LEWISTON  
TOWN OF NIAGARA

VETERANS' MEMORIAL PARK

Standers Settlement Rd

Colony Rd

Colonial Dr



HYDE PARK GOLF COURSE

Porter Rd

FBI WANTS RETURNS

HYDE PARK

Robbins Dr

Hyde Park Blvd

Pine Ave

Pine Ave

Robbins Dr

Packard

Niagara St

GILL CREEK PARK

East 100th St

Buffalo Ave

Buffalo Ave

Niagara Scenic Pkwy

< NIAGARA RIVER

MAP TITLE: WANTS

HYDROPOWER RESERVOIR

WIND POWER

RESERVOIR STATE PARK

TOWN OF LEWISTON  
TOWN OF NIAGARA

Saunders Settlement Rd.

Saunders Settlement Rd.

Windsor Rd.

VETERANS' MEMORIAL PARK

I-190

Lockport Rd.

TOWN OF NIAGARA  
CITY OF NIAGARA FALLS

Lockport Rd.

Milroy Rd.



HYDE PARK GOLF COURSE

HYDE PARK GOLF COURSE

Porter Rd.

MAP TITLE: WANTS

**KEY:**

- FISHING ACCESS
- KAYAK ACCESS
- RESTORATION
- | NEW TRAIL
- ⋮ TRAIL IMPROVEMENTS



HEADWATERS

HYDROPOWER RESERVOIR

TUSCARORA NATION  
TOWN OF LEWISTON

COLONIAL VILLAGE PARK

TOWN OF LEWISTON  
TOWN OF HUNTER

VETERANS' MEMORIAL PARK

Sounders Settlement Rd

Colonial Dr

Garbin Rd

**Attachment C –  
Restoration Concept Plan Map**



**GILL CREEK: LOWER REACH**



- GILL CREEK**  
Solid = Open Channel / Dashed = Buried
- EXISTING TRAIL**  
Niagara River Greenway Trail
- PROPOSED TRAIL**  
Solid = On street / Dashed = Off Street
- MUNICIPAL BOUNDARY**
- SHORELINE RESTORATION**  
Solid = Proposed / Dashed = Existing
- COMMUNITY OUTREACH**  
Design input, Stewardship, etc.
- INFORMAL CREEK ACCESS**  
Stacker Boulders, Fishing Pier, etc.

**NOTES:**

- ① Gill Creek Park enhancements. New canopy trees will be planted in the existing lawn. Additional improvements include stormwater management plantings in areas that retain water near the shoreline and road, invasive species management in shoreline areas, and informal water access points for fishing and/or creek viewing.
- ② This existing private road provides an opportunity to connect the proposed Gill Creek Greenway Trail to the existing Niagara River Greenway Trail. Additional opportunities exist further to the southeast (outside map frame) where a private road passes under the Niagara Scenic Parkway.
- ③ Rail and road crossing. Traffic control and calming measures on the Niagara Scenic Parkway should be explored to allow for safe pedestrian crossing. An alternative method for creating a safe crossing opportunity includes an elevated walkway overpass for pedestrians. Safe crossing will create a strong connection to the Niagara River Greenway Trail and other points of interest such as the NYPA intake observation area.
- ④ A proposed off-street section of the Gill Creek Greenway Trail will pass in close proximity to existing residences. Project partners should account for community engagement in this area to consult with the residents on trail design and alignment.



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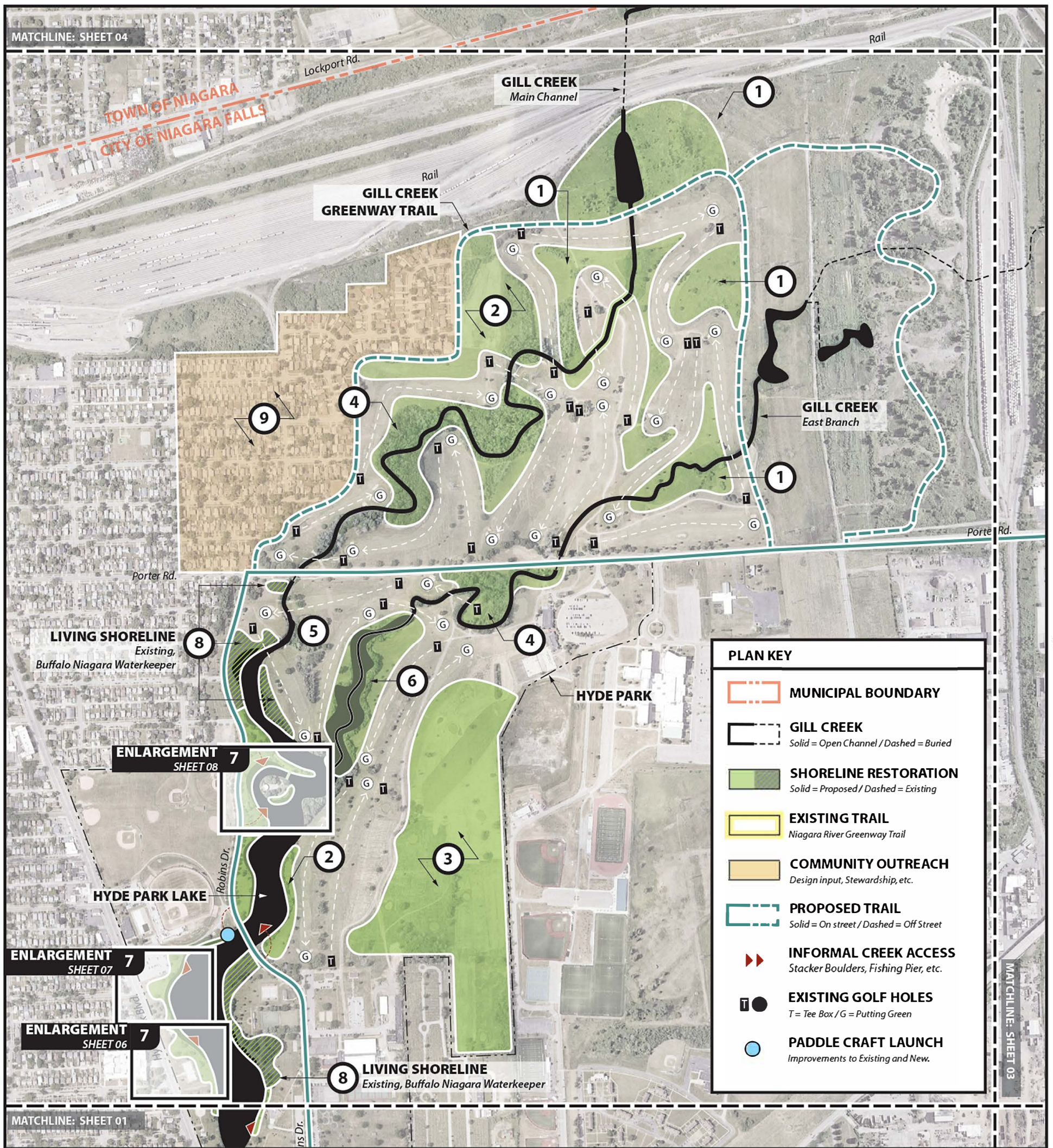
**GILL CREEK RESTORATION CONCEPT PLAN**

ECOLOGICAL REVITALIZATION AND COMMUNITY CONNECTION

*Note: Concepts were developed as a communication tool to convey a general vision for ecological enhancement and community connection along the Gill Creek Corridor. Community input was gathered during in-person meetings held in 2023 and this data informed the proposed conditions described in the plans. Existing conditions were approximated based on field observations and available GIS data. These should be verified prior to advancing projects.*

SHEET TITLE:  
**NIAGARA RIVER TO HYDE PARK**

SHEET NO.:  
**01**



**GILL CREEK: HYDE PARK PLAN**



**NOTES:**

- ① Wet meadow / wetland revitalization area. Design solutions will maintain minimum fairway and rough widths for the golf course while creating much needed pollinator habitat. Plant pallet will utilize mainly herbaceous plant species with limited tree species due to buried hydropowered infrastructure in this area.
- ② Ecological enhancement of these areas will be achieved through reforestation plantings. Proposed activities include invasive species management, upland grassland establishment, and planting upland/riparian tree species.
- ③ Recent changes to the golf course has created opportunities to enhance this nearly 40-acre area. Enhancements could include establishing new park trees in mowed lawn areas, extensive reforestation plantings, and/or larger scale pollinator meadow creation with mowed trails.
- ④ Many Ash Trees have died in this area due to EAB, making reforestation with new species a high priority for erosion control and overall creek health. Riparian trees and shrubs will be planted along the creek within defined no-mow areas.
- ⑤ Existing remnant dogwood shrub swamp. Preserve and enhance with additional plantings and invasive species control as needed.
- ⑥ Future Living Shoreline revitalization area. This site is often the first to experience HABs in summer due to stagnant shallow water conditions, excessive nutrient loading, and an insufficient riparian buffer. Design solutions will shrink the over sized channel to improve flow by creating broad littoral shelves capable of supporting dense and diverse emergent vegetation, which can absorb nutrients and reduce sunlight availability for algae growth. Trees and shrubs will be planted along the edge to increase shading along the creek to help with temperature regulation and erosion control.
- ⑦ Future Living Shoreline revitalization areas. Design solutions will utilize similar techniques used at the existing living shoreline sites in Hyde Park to create a gradual transition between land and water capable of supporting diverse native plants. Public access will be incorporated into these areas via informal fishing access, trails, and signage. Refer to enlargement plans for more information on each site.
- ⑧ Existing Living Shoreline project areas. These projects utilize nature-based practices to revitalize shoreline habitat for the benefit of fish, wildlife, and park visitors. These healthy shoreline environments offer many ecological services to the surrounding area and create unique park assets that provide visitors the opportunity to reconnect with their natural heritage.
- ⑨ A proposed off-street section of the Gill Creek Greenway Trail will pass in close proximity to existing residences. Project partners should account for community engagement in this area to consult with the residents on trail design and alignment.



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**GILL CREEK RESTORATION CONCEPT PLAN**

ECOLOGICAL REVITALIZATION AND COMMUNITY CONNECTION

*Note: Concepts were developed as a communication tool to convey a general vision for ecological enhancement and community connection along the Gill Creek Corridor. Community input was gathered during in-person meetings held in 2023 and this data informed the proposed conditions described in the plans. Existing conditions were approximated based on field observations and available GIS data. These should be verified prior to advancing projects.*

SHEET TITLE:  
**HYDE PARK**

SHEET NO.:  
**02**



**GILL CREEK: EAST BRANCH PLAN**



- |   |   |   |                           |
|---|---|---|---------------------------|
| <b>GILL CREEK</b><br><i>Solid = Open Channel / Dashed = Buried</i>          | <b>PROPOSED TRAIL</b><br><i>Solid = On street / Dashed = Off Street</i> | <b>INFORMAL CREEK ACCESS</b><br><i>Stacker Boulders, Fishing Pier, etc.</i> | <b>MUNICIPAL BOUNDARY</b> |
| <b>SHORELINE RESTORATION</b><br><i>Solid = Proposed / Dashed = Existing</i> | <b>COMMUNITY OUTREACH</b><br><i>Design input, Stewardship, etc.</i>     |   |                           |

**NOTES:**

- ① Gill Creek is severed by railway, highway, and brownfields making a continuous trail along the creek unfeasible. A connection between the upper and lower reach of this waterway is possible by diverting visitors around these impasses via Porter and Military Road.
- ② Future Living Shoreline revitalization areas. Design solutions will utilize nature-based practices to revitalize shoreline habitat for the benefit of fish, wildlife, and the surrounding community. Public access will be incorporated into these areas via informal overlook areas, trails, and signage.
- ③ Public outreach in these neighborhoods will focus on incorporating native plants, no-mow creek buffers, and other landscape practices which are beneficial for pollinators, wildlife, and water quality. Community members should also be invited to participate in the design process as the living shoreline project begins to take shape.



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**GILL CREEK RESTORATION CONCEPT PLAN**

ECOLOGICAL REVITALIZATION AND COMMUNITY CONNECTION

*Note: Concepts were developed as a communication tool to convey a general vision for ecological enhancement and community connection along the Gill Creek Corridor. Community input was gathered during in-person meetings held in 2023 and this data informed the proposed conditions described in the plans. Existing conditions were approximated based on field observations and available GIS data. These should be verified prior to advancing projects.*

SHEET TITLE:  
**EAST BRANCH**

SHEET NO.:  
**03**





**GILL CREEK: MAIN BRANCH PLAN** NORTH 0' 500' 1000'

<b>GILL CREEK</b> <i>Solid = Open Channel / Dashed = Buried</i>	<b>EXISTING TRAIL</b> <i>Niagara River Greenway Trail</i>	<b>PROPOSED TRAIL</b> <i>Solid = On street / Dashed = Off Street</i>	<b>MUNICIPAL BOUNDARY</b>
<b>SHORELINE RESTORATION</b> <i>Solid = Proposed / Dashed = Existing</i>	<b>COMMUNITY OUTREACH</b> <i>Design input, Stewardship, etc.</i>	<b>INFORMAL CREEK ACCESS</b> <i>Stacker Boulders, Fishing Pier, etc.</i>	

- NOTES:**
- ① The proposed Gill Creek Greenway Trail diverts from Military road onto a proposed non-motorized trail that passes through an existing utility right of way. From there, visitors pass over the creek at Isherwood Drive before continuing along a path running along the west bank of Gill Creek.
  - ② The proposed Gill Creek Greenway Trail connects to the existing trail system within Reservoir State Park. At the northern boundary of the park, opportunities exist to pass under the highway via an existing underpass and road. From here visitors can access the Niagara Gorge and many other trails.
  - ③ Existing source water input from the NYPA Reservoir. Opportunities exist to adopt more ecological friendly and proactive management practices of this water source. This includes increasing the inputs during peak algae bloom season to reduce the occurrence and/or shorten the duration of HABs within Gill Creek and Hyde Park Lake.
  - ④ Public outreach in this neighborhoods will focus on incorporating native plants, no-mow creek buffers, and other landscape practices which are beneficial for pollinators, wildlife, and water quality.
  - ⑤ A proposed off-street section of the Gill Creek Greenway Trail will pass in close proximity to existing residences. Project partners should account for community engagement in this area to consult with the residents on trail design and alignment. Additional outreach goals will include educating homeowners on the concepts described in #4.



**GILL CREEK: UPPER REACH PLAN** NORTH 0' 500' 1000'



- NOTES:**
- ① Gill Creek is severed by railway, highway, and brownfields making a continuous trail along the creek unfeasible. A connection between the upper and lower reach of this waterway is possible by diverting visitors around these impasses via Porter and Military Road.
  - ② This branch of the proposed Gill Creek Greenway Trail will follow Gill Creek's east branch, creating a new connection to Veteran's Memorial Park.
  - ③ Refer to sheet 04 for trail connections to Reservoir State Park and the Niagara Gorge.
  - ④ Existing ecological and park enhancements, by others. Park improvements include a boardwalk structure and extensive wetland plantings in a newly created emergent wetland area.
  - ⑤ Proposed habitat enhancement in this area could include invasive species management, reforestation plantings, and/or pollinator meadow establishment. Designs would also enhance the existing trail system located in this area with improved materials, signage, and gathering places.
  - ⑥ Proposed habitat enhancement in this area is limited to herbaceous vegetation and low growing shrubs due to overhead wires. Enhancement goals include invasive species management, increasing shading over the water, and erosion control.
  - ⑦ This large agricultural area may be contributing nutrients and sediment into Gill Creek. Outreach goals will prioritize informing the landowner about best management practices for reducing impacts on local waterways. These include the use of cover crops, proper timing of fertilizer, and incorporating vegetated buffers.
  - ⑧ Build partnership with Town of Niagara Farmland Conservancy and explore opportunities to create ecological enhancement and stewardship plans for this area.

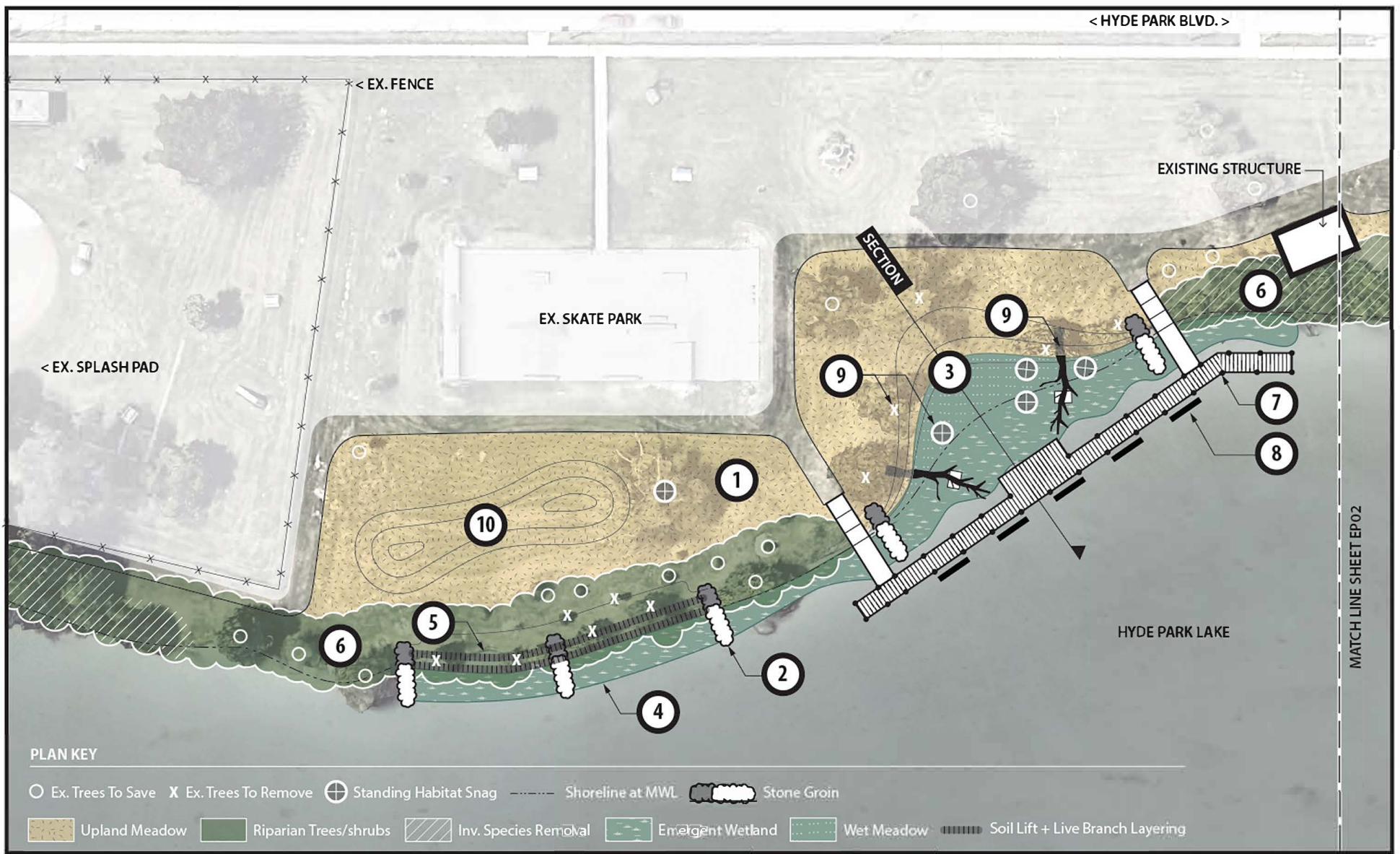


NOVEMBER 2023  
**GILL CREEK RESTORATION CONCEPT PLAN**  
 ECOLOGICAL REVITALIZATION AND COMMUNITY CONNECTION

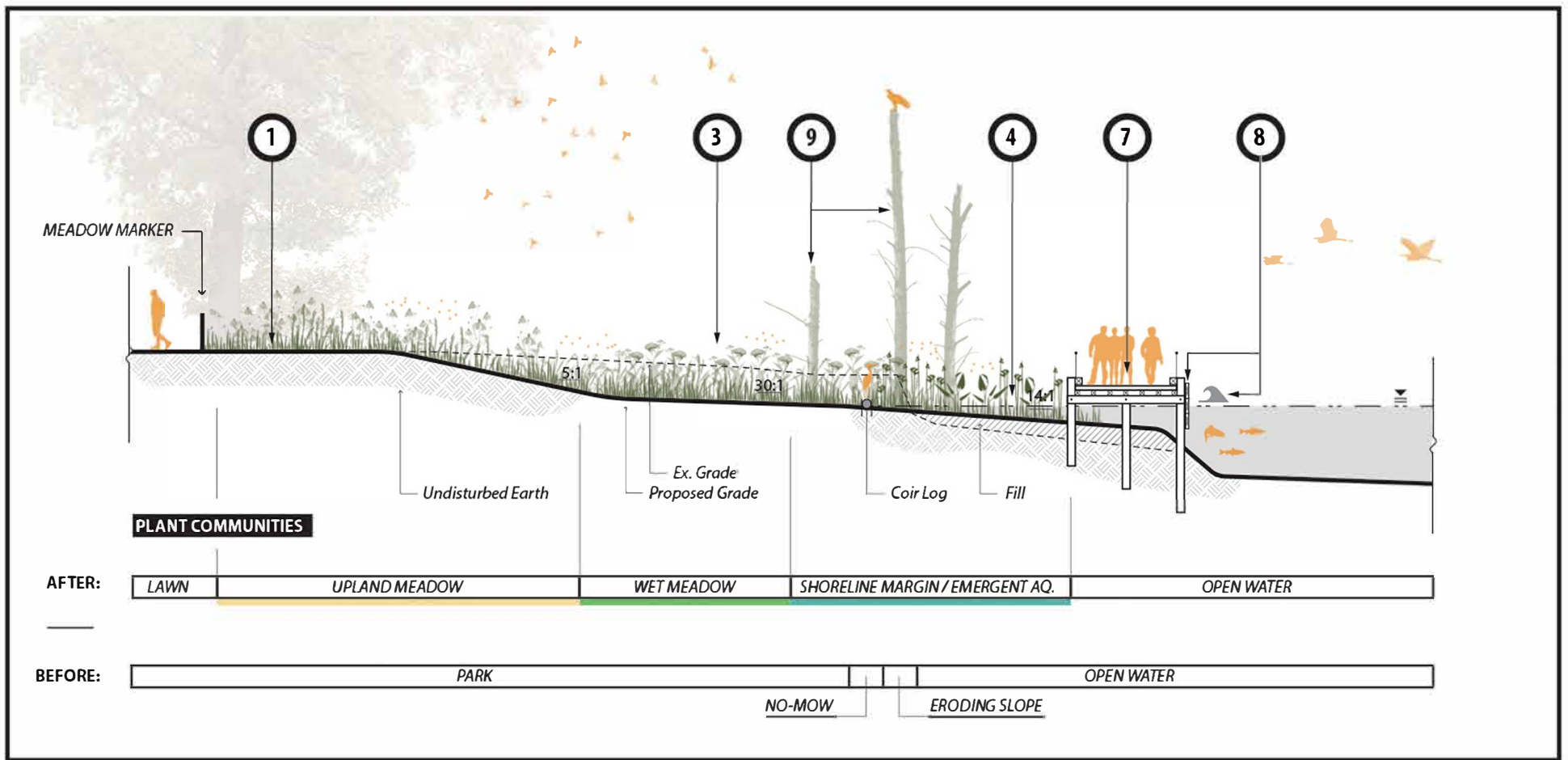
*Note: Concepts were developed as a communication tool to convey a general vision for ecological enhancement and community connection along the Gill Creek Corridor. Community input was gathered during in-person meetings held in 2023 and this data informed the proposed conditions described in the plans. Existing conditions were approximated based on field observations and available GIS data. These should be verified prior to advancing projects.*

SHEET TITLE: UPPER REACH / HEADWATERS  
 SHEET NO.: 05

# **Attachment D – Project Concepts**

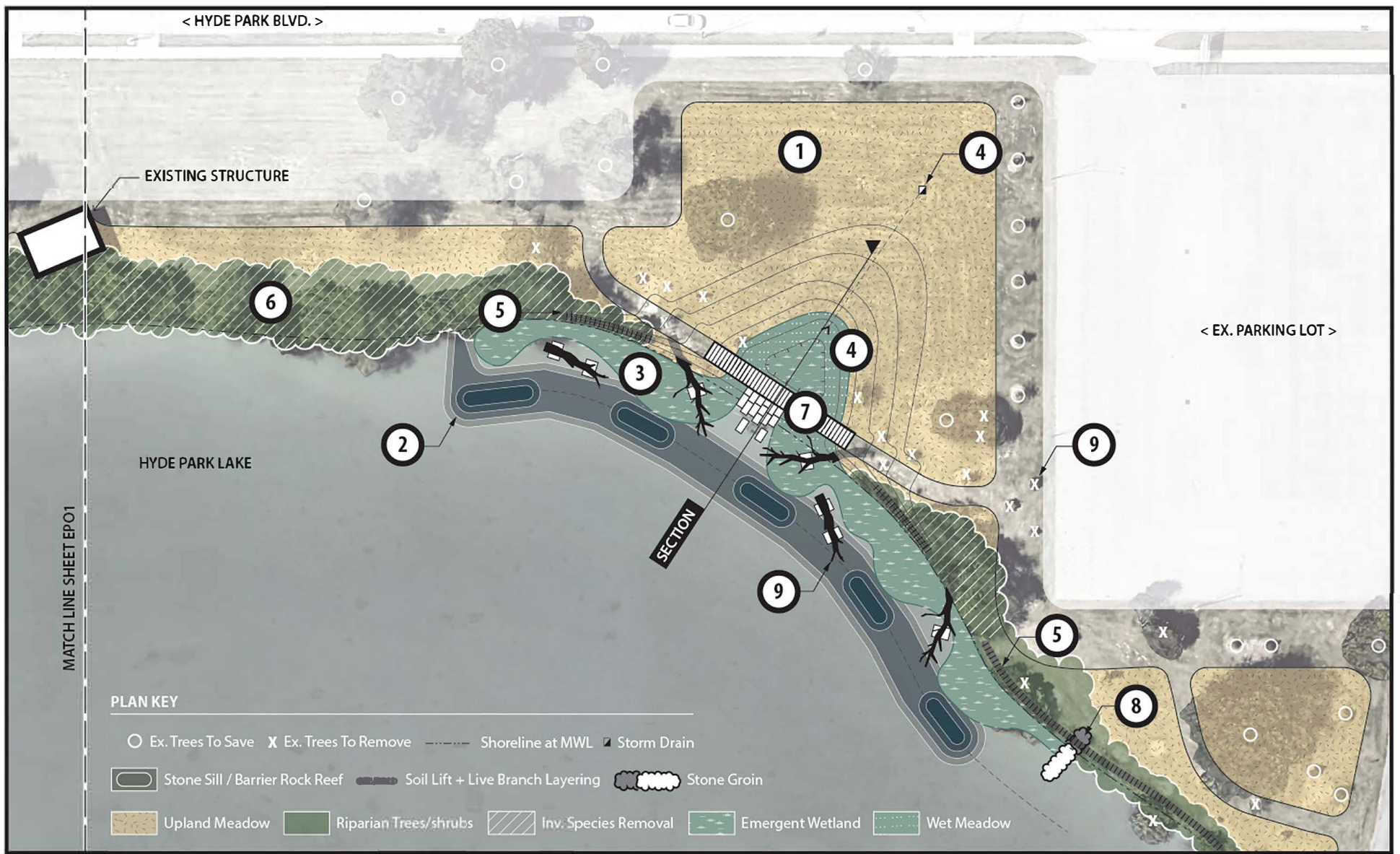


**LIVING SHORELINE CONCEPT PLAN | WEST BANK SITE A** 1" = 60'   NORTH

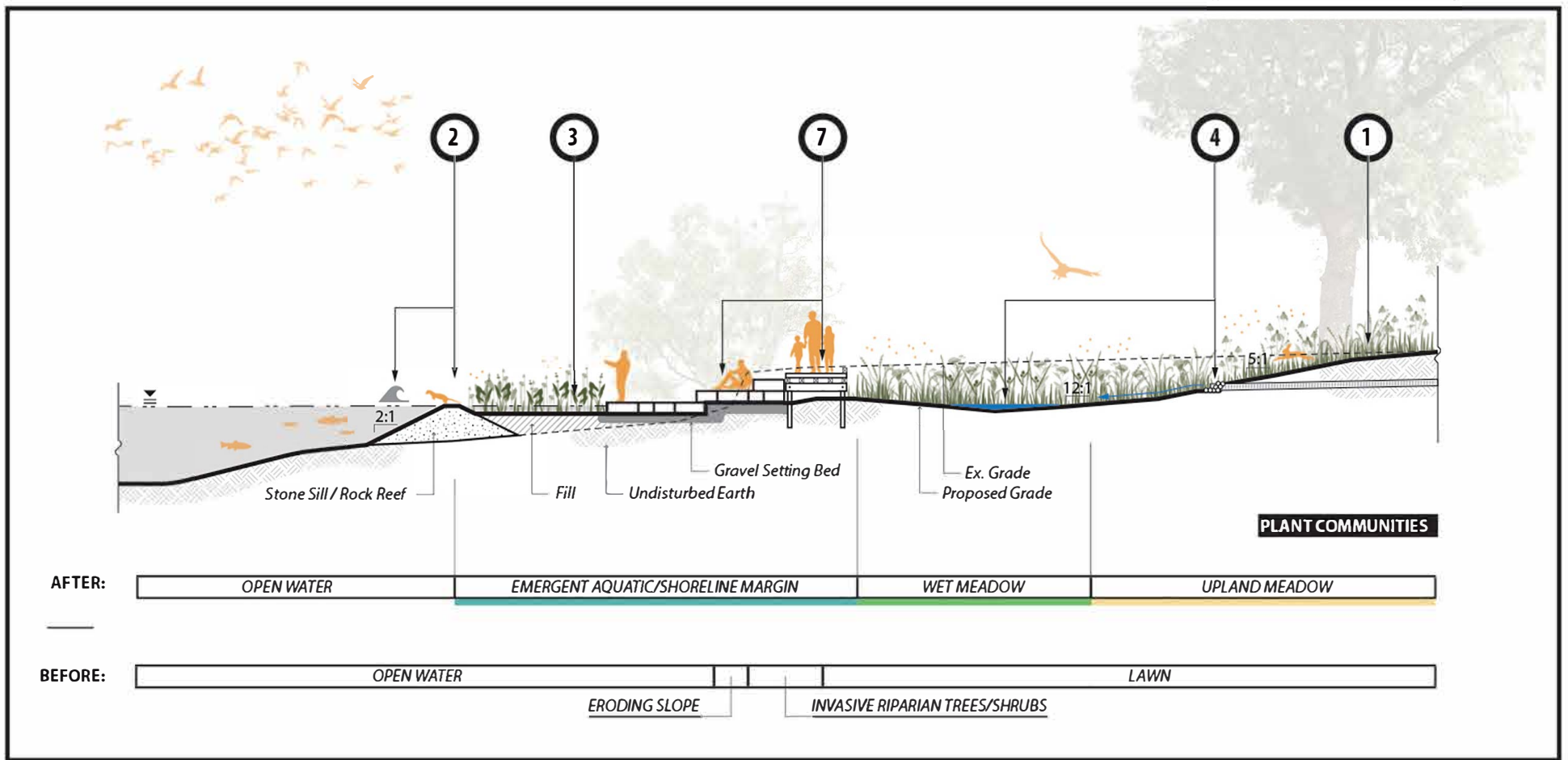


**LIVING SHORELINE CONCEPT SECTION | WEST BANK SITE A** 1" = 20'

- NOTES**
- Lawn to meadow conversion with mowed pathways will create habitat for pollinators and beneficial insects while helping slow and filter stormwater.
  - Stone groins are keyed into the existing slope and strategically positioned to retain fill within proposed littoral wetland areas.
  - A habitat cove is excavated near the water's edge, which supports a large diversity of plant species. Gentle slopes create gradual transition zones between shoreline plant communities and the sheltered shallow water areas create ideal growing conditions for emergent aquatic vegetation, which is currently lacking in the lake.
  - Fringe wetlands support a diversity of emergent aquatic vegetation, offering many water quality and habitat benefits. Excavated materials from the cove are used to create suitable growing conditions for emergent aquatic plants.
  - Reinforced soil lifts with live branch layering are proposed along shorelines. This bioengineering technique will ensure the banks remain stable while native woody vegetation establishes.
  - Riparian trees and shrubs are proposed along much of the shoreline. Existing riparian areas will be enhanced through Invasive species removal and supplemental plantings of native species.
  - The existing dilapidated boardwalk is replaced and repositioned further off-shore to accommodate a littoral wetland at the base of the excavated cove. A widened viewing area towards its center offers visitors the opportunity to view the living shoreline from the water without the need for a boat.
  - Horizontal planking is attached to the vertical pilings of the new boardwalk to attenuate wind driven waves. This will improve growing conditions within the shallow water areas of the littoral wetland.
  - Invasive and hazard trees are cut and re-used to improve habitat by creating in-water structure and standing snags. Felled trees are anchored in place using boulders, and strategically positioned to attenuate wave energy and improve emergent wetland growing conditions.
  - Surplus excavated materials can be used to create subtle berming in the upland meadow, which can intercept overland stormwater flow and retain it before it reaches the waterbody.

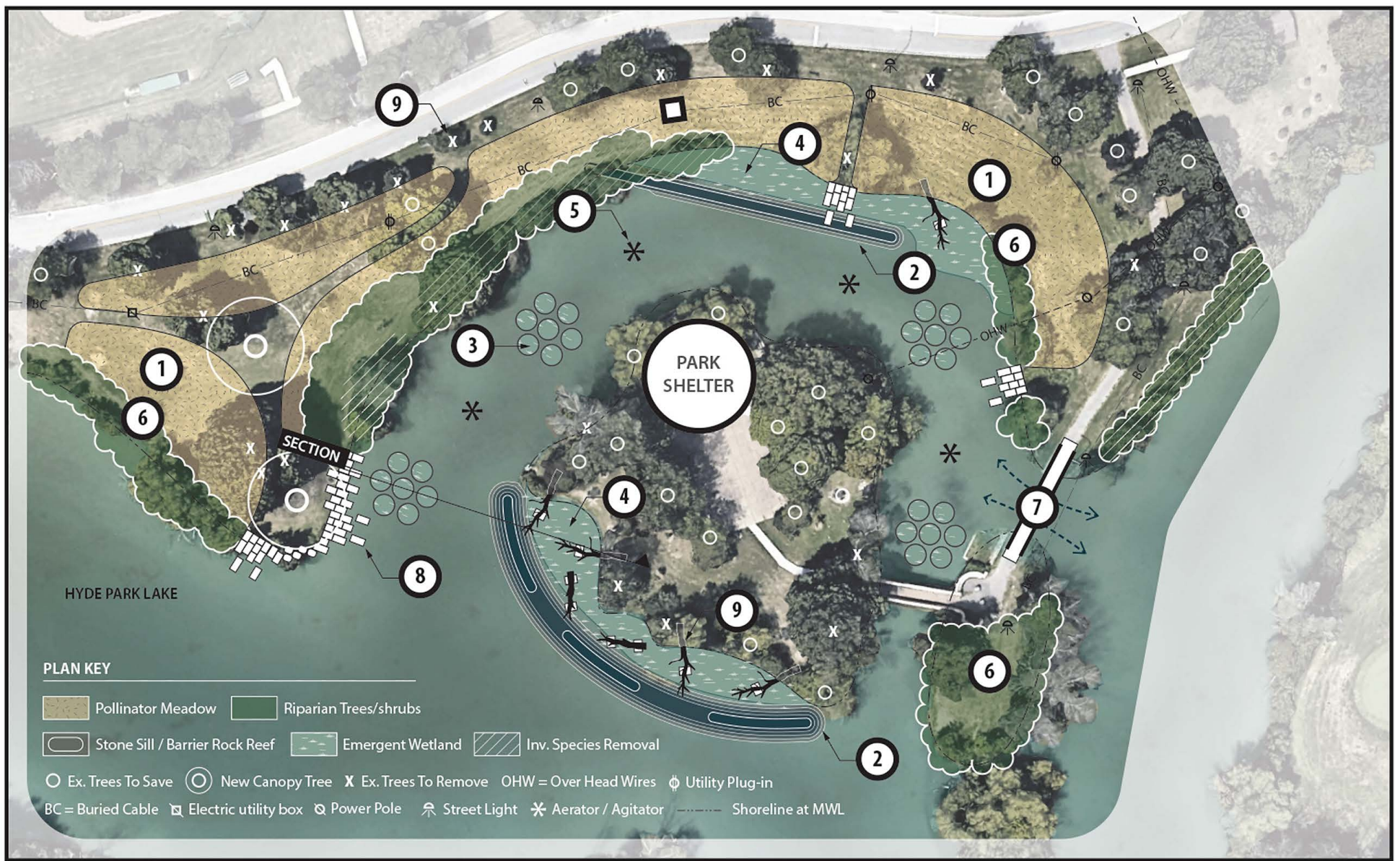


**LIVING SHORELINE CONCEPT PLAN | WEST BANK SITE B** 1" = 60' NORTH

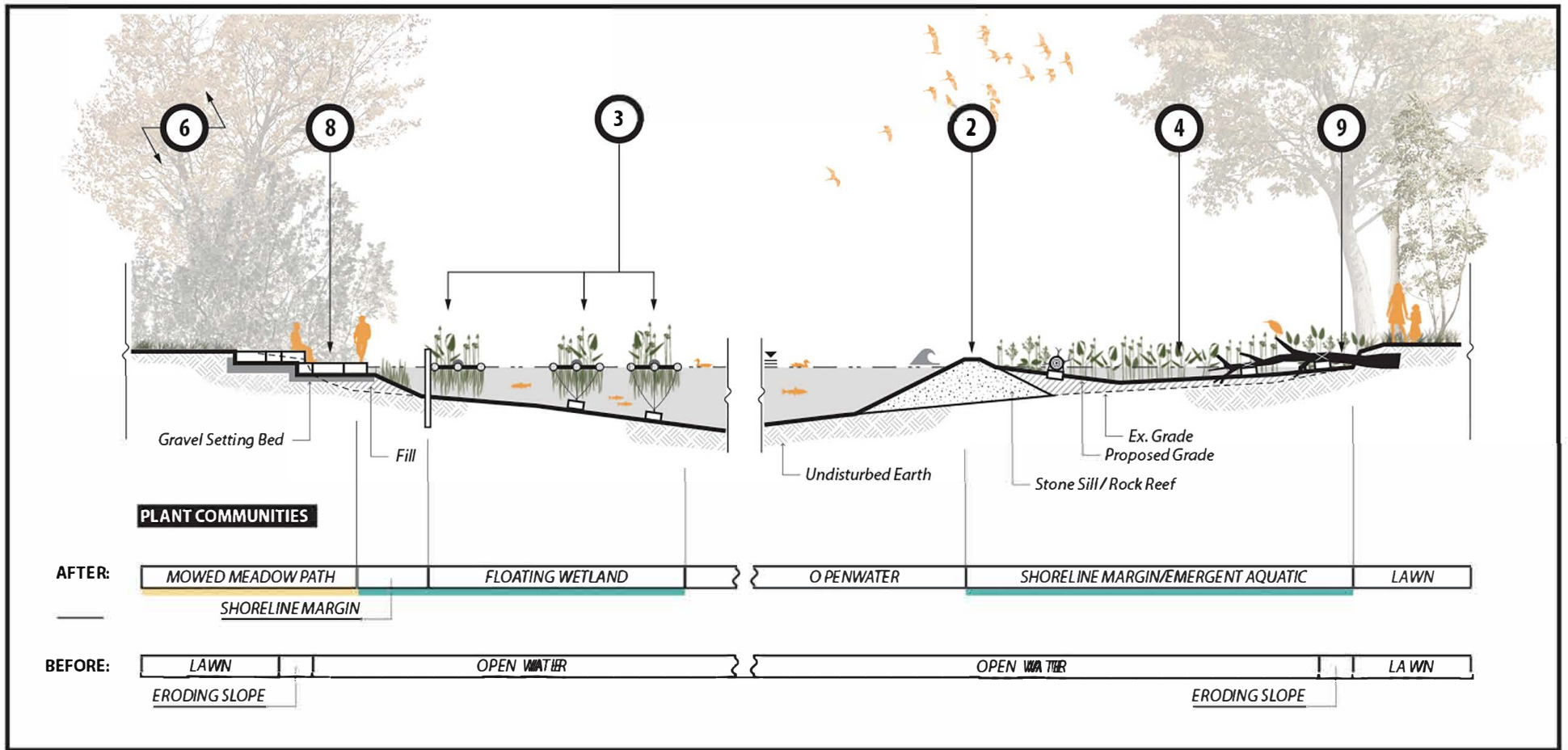


**LIVING SHORELINE CONCEPT SECTION | WEST BANK SITE B** 1" = 20'

- NOTES**
- Lawn to meadow conversion with mowed pathways will create habitat for pollinators and beneficial insects while helping slow and filter stormwater.
  - Stone sills are designed to retain wetland planting substrates and create suitable growing depths for emergent aquatic vegetation. In high energy areas, the stone sills crest above the MWL to act as a segmented barrier rock reef to attenuate wind driven waves.
  - Fringe wetlands support a diversity of emergent aquatic vegetation, offering many water quality and habitat benefits. Excavated materials from the cove are used to create suitable growing conditions for emergent aquatic plants.
  - A habitat cove is excavated near the water's edge, which supports a large diversity of plant species. Gentle slopes create gradual transition zones between shoreline plant communities and the sheltered shallow water areas create ideal growing conditions for emergent aquatic vegetation, which is currently lacking in the lake. Point source stormwater from an existing storm pipe can be redirected to the cove for treatment prior to entering the waterbody.
  - Reinforced soil lifts with live branch layering are proposed along shorelines. This bioengineering technique will ensure the banks remain stable while native woody vegetation establishes along the edge.
  - Riparian trees and shrubs are proposed along much of the shoreline. Existing riparian areas will be enhanced through Invasive species removal and supplemental plantings of native species.
  - A boardwalk structure, reminiscent of the walkway at the existing Living Shoreline along the opposing bank, brings visitors through the wetland area. An informal overlook constructed with 'stacker' stones creates opportunities to get close to the water.
  - Stone groins are keyed into the existing slope and strategically positioned to retain fill within proposed littoral wetland areas.
  - Invasive and hazard trees are cut and re-used to improve habitat by creating in-water structure and standing snags. Felled trees are anchored in place using boulders, and strategically positioned to attenuate wave energy and improve emergent wetland growing conditions.



**LIVING SHORELINE CONCEPT PLAN | DUCK ISLAND** 1" = 80' NORTH



**LIVING SHORELINE CONCEPT SECTION | DUCK ISLAND** 1" = 20'

**NOTES**

- 1 Lawn to meadow conversion with mowed pathways will create habitat for pollinators and beneficial insects while helping slow and filter stormwater.
- 2 Stone sills are designed to retain wetland planting substrates and create suitable growing depths for emergent aquatic vegetation. In high energy areas, the stone sills crest above the MWL to act as a segmented barrier rock reef to attenuate wind driven waves.
- 3 Floating wetlands are constructed with organic materials and anchored using wood pilings in shallow water areas or boulders in deep water locations. These features will create habitat for fish and beneficial insects, while working to improve water quality through nutrient absorption. Additionally, floating wetland add shade to the water helping to regulate temperature.
- 4 Fringe Wetlands are created by importing fill material with the goal of achieving ideal planting depths for emergent aquatic vegetation. This type of vegetation is lacking in the lake and it's abundance can have many water quality and habitat benefits.
- 5 Aerators or bubblers help to agitate and oxygenate stagnant water areas. This can improve conditions for fish and reduce the frequency/duration of HABs in this area.
- 6 Invasive tree/shrub species are removed from existing riparian areas and replaced with native species. Gaps in woody vegetation are created to facilitate access to overlook areas and to create clear sightlines to Duck Island from the park road.
- 7 A new channel may improve water circulation through the Duck Island side channel. Improved circulation may improve water conditions and reduce frequency/duration of HABs in this area. A new pedestrian bridge provides access to duck Island over this new opening.
- 8 Overlook areas are established at key points along the shoreline. Rock 'stackers' create an informal viewing area and mowed pathways through meadow bring visitors to and from these features.
- 9 Invasive and hazard trees are cut and re-used to improve habitat by creating in-water structure and standing snags. Felled trees are anchored in place using boulders, and strategically positioned to attenuate wave energy and improve emergent wetland growing conditions.



NOVEMBER 2023

**GILL CREEK RESTORATION CONCEPT PLAN**

ECOLOGICAL REVITALIZATION AND COMMUNITY CONNECTION

*Note - Concepts were developed as a communication tool to convey a general vision for the site. Existing conditions, including contours, water depth, shoreline location, existing trees, and utility locations were approximated based on field observations. Existing conditions should be verified with a site survey prior to design development and construction documentation.*

**SHEET TITLE: DUCK ISLAND LIVING SHORELINE ENLARGEMENT**

**SHEET NO.: 08**