

**Environmental Assessment
Great Lakes Fishery and Ecosystem Restoration (GLFER)
Technical Memorandum
Appendix J**

Federal Actions In and Adjacent to Jackson Park:
Urban Park and Recreation Recovery Amendment and Transportation
Improvements
Jackson Park, City of Chicago, Illinois

August 2020

National Park Service
Federal Highway Administration

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1.0 Introduction

As part of an effort to restore bird, fish and wildlife habitat within the natural areas of Jackson Park, the Chicago Park District (CPD) and the United States Army Corps of Engineers (USACE) entered into a Project Partnership Agreement signed in August 2014, and a five-year construction contract was awarded in September 2014. The five-year ecological restoration project was authorized through the Water Resources Development Act, Section 506, Great Lakes Fishery and Ecosystem Restoration (GLFER) (USACE 2014). The effort aims to create or enhance nearly 147 acres of native habitat within Jackson Park and along the Lake Michigan shoreline including 24 acres of new natural areas. Installation of over 600,000 native plants throughout these areas will increase the biological diversity of Jackson Park providing critical habitat for wildlife and beautiful scenery for park visitors. Additionally, the effort includes installation of overlooks along the water's edge, new pathways, and the reconstruction of existing pathways on the Wooded Island to improve access and circulation throughout Jackson Park.

If any alterations to a USACE funded project, such as the GLFER project, are anticipated to occur, the USACE must review the proposed alteration to ensure the project can continue to provide its intended benefit to the public and may grant permission for alteration under Section 14 of the Rivers and Harbors Act of 1899, amended and codified as 33 U.S.C. 408 (Section 408). CPD has applied to USACE for an authorization to alter a previously completed federal project under Section 408. USACE is a cooperating agency in this EA, and is conducting its own analysis of the proposed alteration pursuant to its applicable process.

2.0 Existing Conditions

Attachment J-1 provides an overview of the Jackson Park GLFER restoration areas. The current status of the GLFER project is that the proposed improvements surrounding the East and West Lagoons (also referred to as the North Lagoon), and the areas north of Hayes Drive and west of Lake Shore Drive are complete. The long term GLFER Planting Plan preferred by USACE is split up by Plant Community/Habitat Type and spans Jackson Park in its entirety. Table 1 shows the areas proposed for each plant community/habitat type.

Table 1: Preferred Plan Plant Communities

Plant Community/Habitat Type	Acres
(P) pond	17.7
(FM) fringe marsh	20.0
(EI) island existing	2.0
(SM) sedge meadow	2.3
(OSW) savanna/woodland	113.1
Total	155.1

In general, all areas north of Hayes Drive have been planted and invasive plants have been removed. Areas south of Hayes Drive have had invasive plant species removed, but proposed replacement plantings have not been installed.

3.0 Impacts Analysis

The following sections present the impact analysis for potential impacts on GLFER areas for the three alternatives considered.

Potential impacts can be direct, indirect, or cumulative. Direct impacts occur as a result of the proposed action, at the same time and place of implementation. Indirect impacts occur as a result of the proposed action, but later in time or farther in distance from the action. Cumulative impacts result from the “incremental impact of the action when added to other past, present, or reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other actions” (40 CFR 1508.7).

The cumulative impacts analysis will assess the synergistic effect of combining the impacts of the Federal Actions, any indirect impacts following the Federal Actions, and the impacts of the following past, present, or reasonably foreseeable actions that are unrelated to the Federal Actions. Section 5.2.1 of the Environmental Assessment (EA) considers certain other past, present, or reasonably foreseeable projects, unrelated to the OPC project, that potentially impact the same resources. None of those projects were considered to have impacts to the GLFER project.

Detailed descriptions of the alternatives are provided in Section 4.0 of the EA and referenced in this technical memorandum.

3.1 Alternative A: No Action

Alternative A assumes that there is no UPARR boundary conversion, the OPC is not constructed, and no roads are closed.

3.1.1 Direct Impacts

There would be no changes in the GLFER restored areas under Alternative A, because the proposed actions would not occur.

3.1.2 Indirect Impacts – City Actions

There would be no indirect GLFER impacts under Alternative A, because the proposed actions would not occur.

3.1.3 Cumulative Impacts

None of the projects discussed in Section 5.2.1 of the EA result in impacts to GLFER restoration areas. Alternative A would not contribute to any cumulative impacts, as no federal action occurs under this alternative.

3.2 Alternative B: NPS Action (FHWA No Build)

Alternative B includes NPS approval of the partial conversion of recreation due to the construction of the OPC and replacement of recreation opportunities on the east end of the Midway Plaisance.

3.2.1 Direct Impacts

There are no impacts to GLFER restoration areas associated with the 4.6-acre conversion area on the OPC campus or replacement of UPARR areas within the east end of the Midway Plaisance because there are no GLFER restored areas in the conversion area or in the east end of the Midway Plaisance.

3.2.2 Indirect Impacts – City Actions

A description of the indirect permanent and indirect temporary GLFER impacts associated with Alternative B are described in the following sections and summarized in Table 2 below. Permanent impacts are those in which the affected area would not be returned to its original state once an action is completed. Temporary impacts are short-term and only affect an area while an action is ongoing. Once the action is complete, the affected area is returned to its original state. Under Alternative B, all temporarily-impacted areas would be restored in place. All GLFER areas permanently impacted by Alternative B would be replaced on the east side of the Jackson Park Inner Harbor to the south of Hayes Drive. All replacements and restoration location areas were identified in coordination with the CPD and the USACE.

3.2.2.1 Proposed Roadway Closures

There are no impacts to GLFER areas associated with the proposed roadway closures as there are no GLFER restored areas within the roadway footprints.

3.2.2.2 OPC Site Development

Along the east side of Cornell Drive, the CPD proposes to construct a new lift station to intercept and reroute an existing sanitary sewer main that in the existing condition is under the proposed OPC site. In addition, CPD is installing a new electrical duct bank to re-route an existing high voltage electrical duct bank. Temporary fencing along the east side of Cornell Drive would result in temporary impacts to restored GLFER areas, lasting throughout the construction of the Cornell Drive improvements. The proposed lift station would result in permanent impacts. See Attachment J-2.

The Foundation proposes to construct accessible pathway connections from the OPC site to existing GLFER pathways and replace the existing crushed stone screening covered paths with concrete, resulting in temporary impacts to GLFER areas. See Attachment J-3.

3.2.2.3 Track and Field Relocation

There are no impacts to GLFER areas within Jackson Park associated with the track and field relocation because there are no GLFER restored areas near the track and field relocation area.

Table 2: Alternative B - GLFER Impacts

Scope of Work	Permanent Impact	Temporary Impact	Total Area
Lift station, sanitary sewer	78 sq. ft. (0.002 acres)	2870 sq. ft. (0.06 acres)	2948 sq. ft. (0.062 acres)
Path connections, grading	0.00 acres	0.166 acres	0.166 acres
Total	0.002 acres	0.226 acres	0.228 acres

3.2.3 Cumulative Impacts

None of the projects listed in Section 5.2.1 of the EA result in impacts to GLFER restoration areas. The actions of Alternative B would be the only impacts that contribute to the overall negligible cumulative impacts.

3.3 Alternative C: NPS + FHWA Action (Preferred Alternative)

This alternative incorporates impacts associated with Alternative B, in addition to those encountered by improving roadways and bicyclist/pedestrian facilities and additional changes to the UPARR boundary. The analysis of impacts in this section will only discuss the **additional** impacts associated with Alternative C.

3.3.1 Direct Impacts

The widening of southbound Lake Shore Drive to the west would have permanent and temporary impacts to the restored GLFER areas from grading and utility work. Along the west side of Lake Shore Drive, there would be impacts to dunes and meadows. The proposed pedestrian underpasses near the intersections of Lake Shore Drive and Hayes Drive as well as Cornell Drive and Hayes Drive would also result in permanent and temporary impacts. The GLFER impacts along Cornell Drive and Hayes Drive include meadows, savannas, woodlands, sedge lawns, and transition prairies. Impacts along each section of proposed roadway are summarized in Table 3 and depicted in Attachment J-4. The permanent impacts represent areas such as the widening of Lake Shore Drive that would permanently impact the GLFER areas. The temporary grading impacts and temporary utility impacts are areas that would be restored in place.

Table 3: Alternative C – Direct GLFER Impacts

Location/Roadway	Permanent Impact (acres)	Temporary Impact (acres)	Total Area (acres)
Lake Shore Drive	0.71	1.40	2.11
Hayes Drive	0.58	0.07	0.65
Cornell Drive	0.03	0.00	0.03
Total	1.32	1.47	2.79

All impacts to GLFER areas would be restored or replaced within Jackson Park. Areas impacted temporarily by construction would be restored in place using the GLFER planting palate as a guide. Permanently impacted GLFER areas would be replaced on the east side of the Jackson Park Inner Harbor to the south of Hayes Drive. This area was included in the original USACE GLFER restoration planting plans but has not yet been implemented. Therefore, implementing the GLFER planting in this area would serve as a replacement for the permanent impacts by providing a net gain of 1.11 acres compared to the existing restoration area. This implementation is consistent with the overall restoration plan. Replacement and restoration area plans are included in Attachment J-5. All replacement and restoration locations were coordinated with the CPD and the USACE. Table 4 provides a summary of the GLFER impact replacement areas.

Table 4: Proposed GLFER Impact and Replacement Summary

Impact Type	Impact (acres)	Replacement (acres)	Net Difference (acres)
Temporary	1.70	1.70	0.00
Permanent	1.32	2.43	+1.11

A Section 408 modification request was sent from the CPD to the USACE on August 20, 2019. A letter received from the USACE on February 26, 2020 indicated that the Section 408 request is complete. This letter and previous coordination meeting minutes with the USACE are included in Attachment J-6. The USACE provided a public notice for comments on the Section 408 modification request on April 1, 2020. See Attachment J-6. The comment period concluded on May 15, 2020. The USACE will review and consider the comments received prior to making a decision on the City's request. This coordination is ongoing and USACE is preparing its own review of the specific proposal.

3.3.2 Indirect Impacts – City Actions

Alternative C would have the same indirect impacts described in Alternative B. Alternative C would not result in additional indirect impacts because the impacts of the proposed action would be limited to the roadway improvements.

3.3.3 Cumulative Impacts

None of the projects discussed in Section 5.2.1 of the EA result in impacts to GLFER restoration areas. The actions of Alternative C would be the only impacts that contribute to the overall beneficial cumulative impacts.

4.0 Summary

Table 5 indicates the direct, indirect and cumulative impacts to GLFER by alternative. This table summarizes both the incremental and the total impacts associated with Alternative C.

Table 5: Summary of GLFER Impacts by Alternative

Alternative	Direct Impacts	Indirect Impacts	Cumulative Impacts	Total Cumulative Impacts
A	None	None	None	None
B	None	Permanent impact: 78 sq. ft. (0.002 acres) All permanent impact areas would be replaced within Jackson Park Temporary Impact: 0.226 acres All temporary impact areas would be restored in place	None	Permanent Impact: 78 sq. ft. (0.002 acres) All permanent impact areas would be replaced within Jackson Park Temporary impact: 0.226 acres All temporary impact areas would be restored in place

Alternative	Direct Impacts	Indirect Impacts	Cumulative Impacts	Total Cumulative Impacts
<p style="text-align: center;">C (Incremental)</p>	<p>Permanent Impact: 1.32 acres</p> <p>All permanent impact areas would be replaced within Jackson Park</p> <p>Temporary Impact: 1.47 acres</p> <p>All temporary impact areas would be restored in place</p>	<p style="text-align: center;">None</p>	<p style="text-align: center;">None</p>	<p>Permanent Impact: 1.32 acres</p> <p>All permanent impact areas would be replaced within Jackson Park</p> <p>Temporary Impact: 1.47 acres</p> <p>All temporary impact areas would be restored in place</p>
<p style="text-align: center;">B + C (Total)</p>	<p>Permanent Impact: 1.32 acres</p> <p>All permanent impact areas would be replaced within Jackson Park</p> <p>Temporary Impact: 1.47 acres</p> <p>All temporary impact areas would be restored in place</p>	<p>Permanent impact: 78 sq. ft. (0.002 acres)</p> <p>All permanent impact areas would be replaced within Jackson Park</p> <p>Temporary impact: 0.226 acres</p> <p>All temporary impact areas would be restored in place</p>	<p style="text-align: center;">None</p>	<p>Permanent Impact: 1.322 acres</p> <p>All permanent impact areas would be replaced within Jackson Park</p> <p>Temporary Impact: 1.696 acres</p> <p>All temporary impact areas would be restored in place</p>

5.0 References

US Army Corps of Engineers

2014 Jackson Park Section 506: Great Lakes Fisheries and Ecosystem Restoration (GLFER), Chicago Illinois, September 30, 2014.

https://www.lrc.usace.army.mil/Portals/36/docs/projects/Jackson%20Park/Jackson_Park_2014_04_10_Draft%20Project%20Report%20and%20%20Environmental%20Assessment.pdf.