

FINDING OF NO SIGNIFICANT IMPACT

BUBBLY CREEK, SOUTH BRANCH OF THE CHICAGO RIVER, ILLINOIS INTEGRATED ECOSYSTEM RESTORATION FEASIBILITY REPORT AND ENVIRONMENTAL ASSESSMENT CHICAGO, COOK COUNTY, ILLINOIS

The U.S. Army Corps of Engineers, Chicago District (Corps) has conducted an environmental analysis in accordance with the National Environmental Policy Act of 1969, as amended. The final Integrated Feasibility Report and Environmental Assessment (IFR/EA) dated November 2019, for Bubbly Creek ecosystem restoration addresses a degraded aquatic ecosystem and the feasibility of restoring the ecosystem located in the South Branch of the Chicago River, Illinois. The final recommendation is contained in the report of the Chief of Engineers, dated July 9, 2020.

The Final IFR/EA, incorporated herein by reference, evaluated various alternatives that would restore a functional backwater habitat and riparian buffer zone for resident and migratory birds and spawning in the study area. The recommended plan is the National Ecosystem Restoration (NER) Plan and includes:

- Substrate restoration consisting of placing sand and an armor layer composed of rounded river rock and quarried stone over 30.7 acres within the channel and turning basin.
- Riparian plant restoration consisting of invasive species removal, soil amendments and native riparian plantings over 9.3 acres within the channel corridor.
- Emergent plant restoration consisting of substrate amendments and native emergent plantings over 1.0 acre within the channel.
- Submergent plant restoration consisting of substrate amendments and native submergent plantings over 3.3 acres within the channel and turning basin.
- Woody debris restoration consisting of anchoring trees, rootwads, trunks and large branches in approximately 10 locations within the channel to further enhance habitat diversity and provide sheltering areas for aquatic species.

The monitoring and adaptive management plan is included in Appendix H – Monitoring and Adaptive Management and is expected to last five years.

In addition to a “no action” plan, four alternatives were evaluated. In Chapter 4 of the EA, the alternatives were formulated and evaluated. The alternatives included:

- Alternative 0 – No Action
- Alternative 1 – Riparian Planting in Entire Channel;
- Alternative 2 – Substrate Restoration in the Turning Basin, Submergent Planting in the Turning Basin, and Riparian Planting in Entire Channel;
- Alternative 3 – Substrate Restoration in the Entire Channel and Turning Basin, Submergent Planting in the Entire Channel and Turning Basin, Riparian Planting in Entire Channel, Emergent Planting, and Woody Debris [Recommended Plan];
- Alternative 4 – Substrate Restoration in the Entire Channel/Turning Basin, Submergent Planting in the Entire Channel/Turning Basin, Riparian Planting, Exclusive with Bank

Restoration, Emergent Planting, Woody Debris, and Bank Restoration in Downstream/Midstream/Upstream Locations

For all alternatives, the potential effects were evaluated, as appropriate. A summary assessment of the potential effects of the recommended plan are listed in Table 1:

Table 1: Summary of Potential Effects of the Recommended Plan

	Insignificant effects	Insignificant effects as a result of mitigation*	Resource unaffected by action
Aesthetics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Aquatic resources/wetlands	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Invasive species	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fish and wildlife habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Threatened/Endangered species/critical habitat	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Historic properties	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other cultural resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Floodplains	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Hazardous, toxic & radioactive waste (HTRW)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hydrology	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Navigation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Noise levels	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public infrastructure	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Socio-economics	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Environmental justice	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Soils	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Tribal trust resources	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Water quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Climate change	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Recreation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

For the invasive species, the Recommended Plan calls for removing invasive species from the 9.3 acres of riparian area which is a positive effect. Navigation, as listed in the chart, was assumed to be navigation in a federally authorized navigation channel. Bubbly Creek has been deauthorized as a federally authorized navigation channel and therefore, this resource has been identified as being unaffected by the Recommended Plan.

All practicable and appropriate means to avoid or minimize adverse environmental effects were analyzed and incorporated into the recommended plan. Best management practices (BMPs) as detailed in the IFR/EA would be implemented, if appropriate, to minimize impacts.

The Recommended Plan includes planting submergent plants in the turning basin which is a contributing element within the Illinois and Michigan Canal National Heritage Corridor. The submergent plantings were selected to maintain the open water visual characteristics of the

turning basin. Therefore, the Recommended Plan has insignificant effects on the historical resources.

The effect on HTRW and water quality is insignificant. The substrates would be placed in the channel by broadcast spreading. Broadcasting the substrates allows the substrate weight to be loaded slowly and uniformly across the channel bed to confine the sediment. The use of in-water turbidity curtains during placement would be utilized to minimize temporary impacts to downstream water quality, when needed. After implementation, the new substrate would reduce the contaminant transport from the sediment into the water column resulting in an improvement to water quality.

No compensatory mitigation is required as part of the recommended plan.

Public review of the draft IFR/EA and FONSI was completed on May 15, 2015. All comments submitted during the public review period were responded to in the Final IFR/EA and FONSI. A 30-day state and agency review of the Final IFR/EA was completed on April 29, 2020.

Pursuant to section 7 of the Endangered Species Act of 1973, as amended, the U.S. Army Corps of Engineers determined that the recommended plan will have no effect on federally listed species or their designated critical habitat. The U.S. Fish and Wildlife Service stated in an email dated October 1, 2019 that they have no objections.

Pursuant to section 106 of the National Historic Preservation Act of 1966, as amended, the U.S. Army Corps of Engineers determined that historic properties would not be adversely affected by the recommended plan. The Illinois Historical Preservation Office concurred with the determination on March 29, 2010.

Pursuant to the Clean Water Act of 1972, as amended, the discharge of dredged or fill material associated with the recommended plan has been found to be compliant with section 404(b)(1) Guidelines (40 CFR 230). The Clean Water Act Section 404(b)(1) Guidelines evaluation is found in Appendix B – Compliance, Coordination & Information.

A water quality certification pursuant to section 401 of the Clean Water Act would be obtained from the Illinois Environmental Protection Agency (IEPA) prior to construction. The IEPA did not provide any comments during the public review of the draft report. All conditions of the water quality certification would be implemented to minimize adverse impacts to water quality.

A determination of consistency with the Illinois Coastal Zone Management (CZM) program pursuant to the Coastal Zone Management Act of 1972 would be obtained from the Illinois Department of Natural Resources prior to construction. In its letter submitted during the public comment period, the Illinois Department of Natural Resources did not reference whether the project was consistent with the Illinois CZM program. Prior to construction, USACE would submit a request for a consistency determination. All condition of the consistency determination would be implemented to minimize impacts to the coastal zone.

All applicable environmental laws have been considered and coordination with appropriate agencies and officials has been completed.

Environmental criteria used in the formulation of alternative plans were those specified in the Water Resources Council's 1983 Economic and Environmental Principles and Guidelines for

Water and Related Land Resources Implementation Studies. All applicable laws, executive orders, regulations, and local government plans were considered in evaluation of alternatives. Based on this report, the reviews by other Federal, State and local agencies, Tribes, input of the public, and the review by my staff, it is my determination that the recommended plan would not cause significant adverse effects on the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.

27 Oct 20

Date



PAUL B. CULBERSON
COL, EN
Commanding