



Development of a Demonstration Design for Bubbly Creek

ERDC Dredging Operations Technical Support Program (DOTS)

U.S. ARMY CORPS OF ENGINEERS

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Response Summary:

The USACE Chicago District requested assistance in formulating a demonstration plan for the environmental restoration of Bubbly Creek. Bubbly Creek is a backwater waterway off of the Chicago River that has historically been used for discharge of wastewater and combined sewer overflows as well as discharges from the Racine Avenue Pumping Station (RAPS). A restoration plan was developed more than a decade ago that called for substrate restoration, placement of woody habitat structures, clearing of invasive vegetation, and planting of submergent and emergent vegetation. A demonstration project has been proposed for the project to demonstrate that the proposed restoration is able to withstand the high velocity discharges from the RAPS and is constructable considering presence of very soft sediments.

The response to the request consisted of participation in a half dozen meetings with the design team, the city of Chicago and the USEPA GLNPO to develop the size, locations and components of the demonstration as well as monitoring requirements and additional data requirements. In additions, the assistance included review of presentation materials, responses to technical questions.

Period of Performance:

Request date: 15 July 2024 Completion date: 2 October 2024

Benefits of the Response to the USACE Dredging/Navigation Program:

The response provided critical information to the project team regarding components, size, locations and monitoring for a proposed demonstrated along with the potential effects of occasional RAPS discharge events on the restoration.

Deliverable:

Participation in six meetings along with reviews and responses to technical questions.



Providing environmental and engineering technical support to the U.S. Army Corps of Engineers
Operations and Maintenance navigation and dredging missions

Paul R. Schroeder, PhD, PE
ERDC Environmental Laboratory • Paul.R.Schroeder@usace.army.mil

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