

Wisconsin Department of Natural Resources SWIMS Project Summary

General Project Information

Project ID: GL00E02456

Name: FY19 AOC Grant - Lower Green Bay Fox River Benthic Community Assessment and other AOCs

Type: Great Lakes Restoration Initiative

Subtype: Toxics and Areas of Concern

Status: ACTIVE

Start Date: 04/29/2019

End Date: 12/31/2099

Purpose: UW-Green Bay will sample 80 sites within the AOC to assess the benthic invertebrate community and substrate distribution. Lake Superior Research Institute will analyze the samples and calculate the appropriate IBIs. UWGB will expand bathymetry and substrate mapping to include the entire AOC, to help define which benthos are likely degraded. These data will then be ground-truthed using substrates collected in Ponar grabs. UWGB will also deploy 10 dissolved oxygen data loggers throughout the lower Green Bay continuously for the duration of this project. The resulting data will be interpolated to indicate the temporal and spatial extent of low oxygen or hypoxic events. These bathymetry, substrate, and dissolved oxygen data can then be combined to assess benthic invertebrate habitat within the AOC. UWGB will also analyze stable isotopes of carbon and nitrogen in the tissues of fish in the lower Bay of Green Bay, to construct food webs, estimate dietary contributions of potential prey groups to fish species, and determine the amount of energy that higher trophic levels are obtaining from benthic sources within the AOC.

Objective: The 2017 Remedial Action Plan Update highlighted the need for additional benthos and sediment toxicity assessment projects in the AOC by 2020, as comprehensive information on habitat suitability and the distribution of benthic invertebrates within the Lower Green Bay-Fox River AOC is lacking. Additionally, an assessment will be particularly important in determining post-remediation baseline conditions in the AOC as dredging activities are expected to be completed in 2019 for the PCB project, and 2020 for the MGP site. Information gained in the course of this work will not only assist in determining necessary steps for achieving and/or refining the benthos BUI targets, but is also expected to provide relevant information to the Fish and Wildlife Habitat and Populations Technical Advisory Committee that is engaged in a two year process for developing management actions associated with "Degradation of Fish and Wildlife Populations" and "Loss of Fish and Wildlife Habitat" BUIs.

Comments:

Outcome: Studies will support the second and third elements of the Degradation of Benthos BUI, and inform the ongoing effort to develop management actions for the "Degradation of Fish and Wildlife Populations" and "Loss of Fish and Wildlife Habitat" BUIs. The stable isotope ratio analysis of benthic invertebrates, prey fish, and piscivores, will help assess the fifth element of the "Degradation of Benthos" BUI target.

Study Design:

QA Measures:

People

Name	Role	Status	Start Date	End Date	Organization	Comments
PUNKE, EMILY M	COORDINATOR	ACTIVE	04/29/2019	12/31/2099	Wisconsin DNR	Grant Coordinator

Project Statuses

Date	Reported By	Status	Comments
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Actions

Action	Detailed Description	Start	End Date	Status
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Monitoring Stations

Station ID	Name	Comments
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Assessment Units

WBIC	Segment	Local Name	Official Name
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Lab Account Codes

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Account Code	Description	Start Date	End Date
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Forms

Form Code	Form Name
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Methods

Method Code	Description
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Fieldwork Events

Start Date	Status	Field ID	Station ID	Station Name
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Documents

Title	Description	Author	Published	Comments
Lower Green Bay-Fox River AOC Benthic Community and Habitat Suitability Assessment	draft SOW	Chris Houghton, Brie Kupsky		

Budget

Combined Budgets:

Combined SLOH:

Combined Total:

Funding

Organization	Source	Type	Amount	Start Date	End Date
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