

MILWAUKEE ESTUARY AREA OF CONCERN

NON-FEDERAL SPONSORS FUNDING CONTRIBUTION AGREEMENT

This Non-Federal Sponsors (NFS) Funding Contribution Agreement (Contribution Agreement) is made on this day: _____ 2020, by and between Wisconsin Gas LLC and Wisconsin Electric Power Company (doing business as We Energies), the City of Milwaukee, Wisconsin (the City), the County of Milwaukee, Wisconsin (the County), the Milwaukee Metropolitan Sewerage District (MMSD), and the State of Wisconsin, Department of Natural Resources (the DNR) (collectively the “Parties” or “NFS” and each individually a “Party”).

WHEREAS, the Parties wish to enter into this Contribution Agreement, pursuant to Wis. Stat. § 66.0301 and 292.31(3)(b), for the purpose of defining contributions, roles, and responsibilities for the NFS portion of the Great Lake Legacy Act (GLLA) Project Agreement between the United States Environmental Protection Agency (EPA) and the DNR, the City of Milwaukee, Milwaukee County Parks, MMSD, and We Energies for Focused Feasibility Study (FFS), Pre-Design Investigation (PDI), and Remedial Design (RD) of Impacted Sediments, the RD of the proposed Milwaukee Estuary Dredge Material Management Facility (MKE-DMMF, DMMF for short) and the removal of polychlorinated biphenyl (PCB) contaminant Source Material in the Milwaukee Estuary Area of Concern (MKE Estuary AOC), Milwaukee, Wisconsin, hereby referred to as the “MKE20 Federal Agreement”; and

WHEREAS, the Menomonee, Kinnickinnic, and Milwaukee Rivers in the MKE Estuary AOC are listed as being impaired waters under Section 303(d) of the Clean Water Act with the cause of the impairment being contaminated sediment; and

WHEREAS, EPA has identified the MKE Estuary AOC on a list of 10 potential priority AOCs in their Action Plan III (Exhibit C). EPA has indicated that they will prioritize certain AOCs to receive most of the funding prior to a 2024 deadline. The NFS strive to be a priority AOC with a new DMMF as a key component; and

WHEREAS, Port Milwaukee is a department of the City of Milwaukee. References to “the City” include Port Milwaukee, where applicable.

WHEREAS, the NFS have been working toward this Contribution Agreement for some time. In 2019, the NFS applied to the EPA's Great Lakes National Program Office (GLNPO) for GLLA support to conducting FFS, PDI, and RD for the MKE Estuary AOC; and

WHEREAS, in 2016, We Energies signed a Project Agreement with GLNPO for Remedial Investigation and FFS for portions of the Menomonee and Milwaukee Rivers (M&M) defined as Operable Units 1 and 2 (OU1 & OU2). OU1 consists of 1.9 river miles on the Menomonee River from the West Canal Street Bridge to the confluence with the Milwaukee River. A portion of OU1 contains contamination associated with the former West Side Manufactured Gas Plant Facility (West Side MGP) tracked by DNR's Bureau for Remediation and Redevelopment Tracking (BRRTS) case 02-41-556251. OU2 consists of 0.6 river miles on the Milwaukee River from the Menomonee River confluence to the confluence with the

Kinnickinnic River. OU2 contains contamination associated with the former Third Ward Manufactured Gas Plant Facility (Third Ward MGP), tracked by BRRTS case 02-41-579227. The M&M FFS was completed in May 2019. We Energies has decided to close out the M&M Project Agreement and sign on to the MKE20 Federal Agreement (See Exhibit A); and

WHEREAS, in 2018, We Energies, in full cooperation with the City and United States Army Corps of Engineers (USACE), investigated materials in the Milwaukee Harbor (Jones Island) Confined Disposal Facility-Dredged Material Disposal Facility (CDF-DMDF). The CDF-DMDF is owned by the City and operated and maintained by the USACE. The purpose of the investigation was to attempt to locate material that could be beneficially reused to create more space in the CDF-DMDF. The investigation purposefully targeted coarse-grained materials, which typically contain less contamination, to find material that could be reused. The investigation concluded that beneficial re-use of CDF-DMDF material is neither feasible nor cost effective because of PCBs and the high organic content and fine grained-grained nature of the materials; and

WHEREAS, in 2019, We Energies and the City entered into an agreement where We Energies coordinates the design of the expanded CDF-DMDF Extension, which has been renamed to be the MKE-DMMF, and will fund the remainder of the design costs, over and above the funds received from a Wisconsin Department of Transportation Harbor Assistance Program (HAP) grant. In exchange, the City allows We Energies a portion (44,600 cubic yards) of the City's allocated capacity within the CDF-DMDF for sediments from the Kinnickinnic, Milwaukee or Menomonee Rivers; and

WHEREAS, in 2019, We Energies received a HAP grant for \$472,000 for design of the DMMF and in 2020 received a HAP grant addendum of \$100,000 for a total HAP grant amount of \$572,000. We Energies retained Foth to complete the design and We Energies is funding the balance (\$728,000). Currently, the DMMF is estimated to be 42-acres in size and have a capacity of 1.9 million cubic yards based on a crest elevation (top of the berm) of 589.5 feet (ft) (+12 ft International Great Lakes Datum (IGLD) of 577.5 ft), which is 6 ft lower than of crest elevation of the existing CDF-DMDF, after the 8 ft vertical expansion in 2008. Prior to the vertical expansion, the existing CDF-DMDF crest elevation was +10 ft IGLD; and

WHEREAS, in 2019, DNR, We Energies, and the City formed the DMMF Design Technical Work Group (DTWG), a temporary team to work on the pre-design investigation, design, funding, and construction of the DMMF in a collaborative, efficient, and expedient manner to meet the collective goals of the Parties; and

WHEREAS, in 2019, DNR performed an *Analysis of Dredged Material Management Alternatives for the Milwaukee Estuary Area of Concern Great Lake Legacy Act Projects* which evaluated three alternatives, including no action, landfill, and the proposed DMMF. The DNR recommends the DMMF because it meets the threshold criteria, is similar to a landfill for most balancing criteria but has significantly lower costs and is more sustainable. The DMMF is expected to be \$110 to \$135 million more cost effective for disposal than a landfill. DNR performed a 45-day public comment period, through January 9, 2020, for the document. Three people submitted comments, all in favor of the DMMF; and

WHEREAS, in 2019, DNR coordinated with EPA for the USACE to provide technical assistance to design the DMMF. USACE is providing a peer review of FOTH's's design to ensure that the DMMF is

designed to the most current and defensible technical standards; and

WHEREAS, the NFS agree that the proposed DMMF is the most cost-effective path to address the beneficial use impairments associated with contaminated sediment in the MKE AOC; and

WHEREAS, We Energies is one member of a Responsible Party group (The Solvay Group) that is responsible for conducting a Remedial Investigation and Feasibility Study under an Administrative Settlement Agreement and Order on Consent with the EPA on the former Milwaukee Solvay Coke & Gas Superfund Alternative Site; and

WHEREAS, We Energies acquired property at 311 East Greenfield Avenue, Milwaukee, Milwaukee County, Wisconsin, the former Milwaukee Solvay Coke & Gas Superfund Alternative Site. We Energies has entered into a separate Administrative Settlement Agreement and Order on Consent to remediate the upland portion of the Site under a Non-time Critical Removal Action. We Energies subsequently sold the majority of the upland property for purposes of industrial redevelopment; and

WHEREAS, The EPA and DNR are working to defer Milwaukee Solvay Coke & Gas Superfund Alternative Site from the Superfund program to the state. The deferral is expected to take place after the Non-time Critical Removal Action is completed, two negotiated agreements are finalized between We Energies and DNR (the Upland Site Negotiated Agreement and the Sediment Site Negotiated Agreement), and EPA recovers or settles its claims for past response costs at the Site, as more thoroughly described in the Memorandum of Understanding Between the EPA and DNR regarding the oversight and enforcement of remaining response actions under state law at the Milwaukee Solvay Coke & Gas Superfund Alternative Site, Milwaukee, Wisconsin, signed October 10, 2019; and

WHEREAS, We Energies is presently the only member of The Solvay Group that is working on the Milwaukee Solvay Coke & Gas Superfund Alternative Site collaboratively with the DNR; and

THEREFORE, NOW, after valuable consideration of the foregoing recitals, the covenants, promises and agreements contained, the receipt and sufficiency of which are hereby acknowledged and approved, the Parties agree to enter into this Contribution Agreement effectuate the undertaking of actions set forth herein to address the Project under Wis. Stat. § 281.83(1), the Parties hereby agree as follows:

1. GENERAL

1.1. Definitions.

- (a) Unless explicitly provided for in this Contribution Agreement or the MKE20 Federal Agreement, terms shall have their ordinary meaning.
 - i) “Contribution Agreement” means this Agreement.
 - ii) “MKE-DMMF” means Milwaukee Estuary Dredge Material Management Facility.
 - iii) “GLNPO” means the Great Lakes National Program Office of the EPA.

- iv) "MKE20 Federal Agreement" means the agreement between EPA, DNR, the City of Milwaukee, Milwaukee County Parks, Milwaukee Metropolitan Sewerage District, and We Energies, for a FFS, PDI, RD, the RD of the proposed DMMF, and the removal PCB contaminant source material in the MKE Estuary AOC, Milwaukee, Wisconsin.
- v) "NFS" means the Non-Federal sponsors signatory to this Contribution Agreement, including We Energies, the City of Milwaukee, the County, MMSD and DNR.
- vi) "Overmatch" means funds (cash or monetary equivalent of In-Kind Contribution) provided by a NSF that exceeded the original commitment, as set forth in the SOW to the MKE20 Federal Agreement and Section 1.2 herein, have been verified and accepted by GLNPO and can be utilized as NFS contribution to MKE20 Federal Agreement.
- vii) "Project" means work set forth in the Scope of Work attached to the MKE20 Federal Agreement for feasibility and design and its subsequent amendments.
- viii) "Required Cash Contribution" means the balance due to EPA under the MKE20 Federal Agreement after GLNPO's final accounting of the Total Project Costs and each Party's total contribution to the project.

1.2. Cash and In-Kind Contributions. To facilitate implementation of the Project, the NFS are willing and able to contribute funds and In-Kind Contributions to satisfy the Project's Non-Federal Share and, to the extent permitted by law, to perform the other obligations of the NFS under the MKE20 Federal Agreement. The NFS will provide 35% of Project costs which will be met through a combination of cash and In-Kind Contributions. The following subsections contains the anticipated project costs and contributions from each NFS under this Contribution Agreement.

- (a) The City In-Kind Contributions. The City will contribute In-Kind \$400,000 for the purposes of the Project. The value of the City's contribution for as-built evaluation, utility locate, Grand Trunk sewer assessment and cleanout is estimated to be \$100,000 each based on City estimates. GLNPO shall determine the value of the City's contributions in the final accounting.
- (b) DNR Contributions. Under the MKE20 Federal Agreement, DNR will provide bonding and overmatch during the feasibility and design phases of the project in the amounts of \$500,000 and \$126,204.35, respectively, totaling \$626,204.35. The \$126,204.35 of overmatch is more overmatch than identified at the time of MKE20 Federal Agreement signing, which was \$25,000. The \$126,204.35 of overmatch includes \$36,204.35 from the Lincoln Park Phase II project and \$90,000 from the Kinnickinnic River project; both of which are being verified by EPA GLNPO and subject to change. DNR will apply the amount of overmatch EPA GLNPO determines to this project. EPA GLNPO has included \$525,000 in the estimated total project cost as contributions from the DNR. DNR would document an increase from \$525,000 to \$626,204.35 to account for the additional overmatch in an future modification to the MKE20 Federal Agreement. If allowed by EPA, DNR may also provide In-kind contributions such as staff time to review documents covered under the MKE20 Federal Agreement. DNR In-kind contributions are not currently included in the estimated total project cost.

- (c) The County In-Kind Contributions. Under the MKE20 Federal Agreement, the County In-Kind Contributions include providing access to County property during the feasibility and design phases of the project and delivered documentation of such services to EPA. Access to the County property includes the hotlining of County utilities within the project area. No dollar amount has been established yet for access to County property or hotlining.
- (d) MMSD In-Kind Contributions. Under the MKE20 Federal Agreement, MMSD provides In-Kind Contributions during the feasibility and design phases of the project and delivered documentation of such services to EPA in the amounts of \$6,200,000. EPA has included these amounts in the estimated total project cost as contributions from the NFS. If allowed by EPA, MMSD would also include In-Kind Contributions related to moving Combined Sewer Outfall (CSO) 195, which currently discharges into the DMMF footprint. EPA has not yet included amounts for CSO 195 in the estimated total project cost.
- (e) We Energies Contributions. Under the MKE20 Federal Agreement, We Energies provides In-Kind Contributions and overmatch funds during the feasibility and design phases of the project and delivered documentation of such services to EPA in the approximate amounts of:

(1)	Solvay Car Ferry Slip Design	\$375,000
(2)	NAPL Remedial Design	\$1,200,000
(3)	DMMF Design with WISDOT HAP	\$1,200,000
(4)	M&M FFS Overmatch	\$350,000
(5)	WISDOT HAP Grant Addendum	\$100,000

EPA has included these amounts in the estimated total project cost as contributions from the NFS.

- (f) Required Cash Contributions. After the In-Kind Contributions from the Parties have been determined by GLNPO, GLNPO will calculate the Required Cash Contribution, referred to as the “balance required” in the MKE20 Federal Agreement. The Parties to this Agreement agree that the Required Cash Contribution shall be paid by the DNR based on DNR’s respective Cash Contribution and In-Kind Contribution commitments as set forth herein. The Parties may agree to an alternative distribution, if agreed to, in writing, by all the NFS. The Required Cash Contribution for the NFS is defined as the difference between a minimum of 35% of Project costs and the total of all In-Kind Contributions. Subject to the contingencies of Section 1.3 below, DNR will provide cash to pay the balance required from the NFS, with allocation of cash contributions as follows.

- (i) DNR Cash Contributions. Under the authority of Wis. Stat. § 281.87, the DNR has, on April 2, 2020 put forth the expected Required Cash Contribution, estimated as 100% of the expected Required Cash Contribution that is subject to final accounting of all In-Kind contributions under the MKE20 Federal Agreement. The DNR maximum total cash contribution under this Contribution Agreement is \$500,000.
 - (ii) Remaining Cash Contributions. If DNR's Cash Contributions required under this Contribution Agreement and the MKE20 Federal Agreement exceeds its total cash contribution maximum as set in Section 1.2(f)(i), the balance of any amounts owed shall be paid as discussed in 1.2(g).
- (g) The Parties intend that the Required Cash Contributions shall be fully satisfied by the respective Cash Contributions made by DNR. In the event of actual or potential shortfall of Required Cash Contribution, other than by default under subsection (h), the Parties will 1) identify additional In-Kind Contribution opportunities, 2) require a reduction in Federal matching funds, or 3) identify a reduction in project scope as necessary to avoid such shortfall amounts, in that order.
- (h) During any period that a Party is in default in whole or in part in timely performing its obligations to pay Cash Contributions or make any contribution of In-Kind Contributions under this Agreement, such Party shall be obligated to pay any damages to or refund to the Non-defaulting Party(ies) any amounts or contributions paid or contributed by the Non-defaulting Party(ies) towards the Project to satisfy such defaulting Party's obligations under this Agreement.
- 1.3. Terms Effective and Expressly Contingent. The Parties' obligations under this Contribution Agreement shall only become effective and are expressly contingent upon all of the following events first occurring:
- (a) The execution and implementation of a MKE20 Federal Agreement between the Parties, as NFS, and EPA GLNPO;
 - (b) DNR has adequate bonding authority or receives annual appropriations sufficient to meet its share of scheduled expenditures for the Project;
 - (c) Each NFS provides adequate funds in the amounts indicated in this Contribution Agreement;
 - (d) The execution of an amendment to or restatement of the MKE20 Federal Agreement between the Parties, as NFS, and EPA GLNPO, with respect to financial, In-Kind or other commitments or obligations other than as provided in the MKE20 Federal Agreement;
- 1.4. Records Preservation. Parties shall preserve all account statements, documents and other records associated with and throughout the duration of this Contribution Agreement and for a minimum of five years after termination or completion of this Contribution Agreement. This provision shall be consistent with Section 5.13 regarding Wisconsin Public Records Law.

- 1.5. Final Accounting. Upon completion of the project or termination of the MKE20 Federal Agreement, within ninety (90) calendar days after receipt of written notice from GLNPO, the Parties shall pay EPA the amount necessary to meet their respective shares of the Required Cash Contributions under this Contribution Agreement. The Parties contributing cash contributions shall provide a full accounting of funds expended in a protocol acceptable to EPA GLNPO to fulfill the Non-Federal Sponsor Contribution requirements.
- 1.6. Conflicts. In the event of a conflict between the terms of this Contribution Agreement and the terms of the MKE20 Federal Agreement regarding the obligations of the NFS, the terms of this Contribution Agreement shall govern and control in any disputes between NFS. In the event of a conflict between the terms of this Contribution Agreement and the terms of the MKE20 Federal Agreement as to any subject matter not relating to the obligations of the NFS, the terms of the MKE20 Federal Agreement shall control.
- 1.7. Applicable Law and Venue. This Contribution Agreement and any claims arising under this Agreement shall be governed by the laws of the State of Wisconsin. Any litigation arising out of or relating in any way to this Contribution Agreement or performance shall be brought only in the courts of the State of Wisconsin located in Milwaukee County, Wisconsin. In the event that any provision of this Contribution Agreement is determined by a court of competent jurisdiction to conflict with any applicable federal, state or local law or regulation, the applicable law or regulation shall control.
- 1.8. Severability. A determination by a court of competent jurisdiction that any part of this Contribution Agreement is invalid shall not invalidate or impair the force or effect of any other part hereof, except to the extent that such other part is wholly dependent for its operation on the part so declared invalid.
- 1.9. Modification. Specific terms of this Contribution Agreement may be modified or extended at any time by mutual written agreement of the Parties. If a Party requests the Contribution Agreement to be modified but another Party does not concur, efforts to resolve the dispute shall follow the dispute resolution procedure in Section 5.1 of this Contribution Agreement. This provision shall be consistent with Section 9.8 regarding Amendments to this Contribution Agreement.
- 1.10. Compliance with Applicable Laws and Agreements. Parties agree to fulfill the obligations and to perform the requirements imposed on and assumed by them in compliance with all applicable laws, ordinances, codes, rules, order and regulations, including, where applicable, the terms of the MKE20 Federal Agreement and the Contribution Agreement.
- 1.11. Documentation of In-Kind Contributions. When applicable, the Parties agree to provide documentation to the other Parties in unison with each quarterly report on In-Kind costs submitted to GLNPO under the MKE20 Federal Agreement. The MKE20 Federal Agreement requires the submission of a quarterly report of In-Kind Contributions 60 days following the end of a quarter. The below information in Table 1 outlines the expected dates to include.

Table 1

Calendar Quarter	Months Included	Approximate Due Date
Q1	January, February, March	May 31
Q2	April, May, June	August 31
Q3	July, August, September	November 30
Q4	October, November, December	February 28

- 1.12. Disbursement of Project Funds Documentation. When applicable, the Parties agree to provide documentation to the Parties in unison with each disbursement of project funds under the MKE20 Federal Agreement with EPA GLNPO. This documentation shall include a listing of the dates and amounts of each prior disbursement that are part of the contribution from each Party.
- 1.13. Monitor Work Schedules and Budget Projections. The Parties agree to monitor work schedules and budget projections related to the activities and In-Kind contributions under the MKE20 Federal Agreement.
- 1.14. Financial Records. The Parties agree to maintain financial records of costs and expenses for the Project in such a manner that amounts due or paid under the MKE20 Federal Agreement can be apportioned pursuant to a protocol acceptable to EPA GLNPO.
- 1.15. Information and Data Sharing. The Parties agree to use reasonable efforts to make information, records and data available at the request of other Parties that are pertinent to the performance of the obligations to this Contribution Agreement and the MKE20 Federal Agreement. The Parties agree to use reasonable efforts to afford the NFS the opportunity as necessary to confer with representatives or contractors or other persons who may be able to furnish information relevant to the performance of the obligations to this Contribution Agreement.
- 1.16. Access to Property. The Parties agree to conduct all negotiations essential for acquiring access to facilities or property owned by their respective entity through the performance of requirements listed in the MKE20 Federal Agreement. Each NFS shall, upon request of another, provide assistance by making arrangements with owners or lessees of property for the right to enter upon and use land for the purposes of constructing Project elements, making surveys, sampling or other activities required to be performed under the MKE20 Federal Agreement. Procurement of such easement or access rights by the NFS, as needed for the Project, may be a pre-condition for the performance of the obligations of this Contribution Agreement and the MKE20 Federal Agreement.

2. COMMON RESPONSIBILITIES AND COMMITMENTS TO THE PARTIES

- 2.1. The Parties agree to collaboratively participate in public outreach as necessary and appropriate.
- 2.2. The Parties agree to work amongst themselves to efficiently and cost effectively achieve the larger collective goals of the MKE Estuary AOC.

- 2.3. The Parties agree to maximize, to the extent permissible by GLNPO, the amount of In-Kind contributions to the MKE20 Federal Agreement.
- 2.4. The Parties agree to produce deliverables required under the MKE20 Federal Agreement.
- 2.5. The Parties agree to coordinate to secure funds for the construction of the DMMF.
- 2.6. The Parties expect that some of the Parties will enter into a separate MKE-DMMF agreement regarding contributions and a Disposal Use Plan for the DMMF in effort to safely and efficiently store material in support of commercial navigation, harbor maintenance, and environmental remediation projects across the AOC and throughout Milwaukee Harbor to maximize economic and environmental benefit.

3. DNR SPECIFIC RESPONSIBILITIES AND COMMITMENTS

- 3.1. DNR will execute a grant (00E02392) and Cooperative Agreement with EPA to perform site investigations in the South Menomonee Canal, Kinnickinnic River, and Milwaukee Bay.
- 3.2. DNR will perform a special study, screening the MKE Estuary AOC for Per- and polyfluoroalkyl substances in surface water and sediment.
- 3.3. DNR will participate in the DTWG and provide direction regarding DNR permitting for the DMMF.
- 3.4. DNR recognizes the State of Wisconsin submerged land grant.
- 3.5. DNR aspires to include a portion DMMF construction costs in its budget request.
- 3.6. DNR will execute all necessary actions to defer the Milwaukee Solvay Coke & Gas Superfund Alternative Site from EPA to Wisconsin DNR jurisdiction.
- 3.7. Permits. The DNR agrees to sign, when appropriate, applications for local, state, and federal permits prepared under the MKE20 Federal Agreement or allow an authorized representative to sign on their behalf.

4. CITY RESPONSIBILITIES AND COMMITMENTS

- 4.1. The City will provide technical assistance in the pursuit of Harbor Assistance Program funding for the construction of the DMMF.
- 4.2. Permits. The City agrees to sign, when appropriate, applications for local, state, and federal permits prepared under the MKE20 Federal Agreement or allow an authorized representative to sign on their behalf.

5. COUNTY RESPONSIBILITIES AND COMMITMENTS

- 5.1. Access to County Property. The County authorizes the Parties and their Project contractors and representatives' access to County-owned real property adjacent to, and in the bed of, the Milwaukee River, through its 878 acres of continuous greenspace along Reaches 1, 2, and 3.

- 5.2. Permits. The County agrees to sign, when appropriate, applications for local, state, and federal permits prepared under the MKE20 Federal Agreement or allow an authorized representative to sign on their behalf.

6. MMSD RESPONSIBILITIES AND COMMITMENTS

- 6.1. Basin H. MMSD intends the Basin H PCB source control project to remove PCB contaminated material from the sewer to prevent it from entering the Milwaukee River. It may be possible that factors outside MMSD's reasonable control cause the Basin H PCB source control project to be delayed. If MMSD is unable to reasonably undertake the Basin H PCB source control project, MMSD shall not be liable for any cash contribution or other in-kind contribution under this Contribution Agreement, however MMSD shall make good faith efforts to identify additional opportunities for in kind contributions. MMSD currently intends to rebid the Basin H PCB source control project.
- 6.2. Sampling. MMSD will assist with surface water sampling associated with design of the DMMF.
- 6.3. Permits. MMSD agrees to sign, when appropriate, applications for local, state, and federal permits prepared under the MKE20 Federal Agreement or allow an authorized representative to sign on their behalf.
- 6.4. Discharges to MMSD. The parties expect that MMSD will accept and treat effluent from the new DMMF and from sediment dewatering activities related to MKE Estuary AOC projects, subject to the discharge regulations and enforcement standards in accordance with Chapter 11 of the MMSD rules.
- (a) Project designs will need to consider conveyance facilities available for discharge to MMSD. MMSD cannot guarantee that the current conveyance system has adequate capacity to carry all anticipated discharges from the DMMF or from MKE Estuary AOC projects to the Jones Island Water Reclamation Facility.
- 6.5. Fees. MMSD agrees that all fees associated with the pretreatment permit, sampling, analysis and treatment costs shall be added to MMSD's in kind contribution.

7. WE ENERGIES RESPONSIBILITIES AND COMMITMENTS

- 7.1. In-Kind Contributions.
- (a) We Energies will facilitate design the DMMF using a combination of HAP grant funding and self-fund the remaining portion.
- (b) We Energies will design remediation of contaminated sediment in OU2 (Non-aqueous phase liquid (NAPL) deposits A & B, as identified in the M&M FFS Figure 9c in Exhibit B, under the NR 700 series of Wis. Admin. Code. We Energies will submit a Wis. Admin. Code § NR 724.09 Design Report to the DNR that contains Design Plans and Specification under Wis. Admin. Code § NR 724.11.

- (c) We Energies will design remediation of sediments present in the Solvay Car Ferry Slip under the NR 700 series of Wis. Admin. Code. We Energies will submit a Wis. Admin. Code § NR 722.13 Remedial Actions Options Report and a Wis. Admin. Code § NR 724.09 Design Report to the DNR that contains Design Plans and Specification under Wis. Admin. Code § NR 724.11. The Remedial Actions Options Report will provide the necessary equivalent to a Feasibility Study for EPA GLNPO.
- 7.2. Prior to completing In-Kind Contributions described in 7.1(c), We Energies and DNR will prioritize completing all actions required to defer the Milwaukee Solvay Coke & Gas Superfund Alternative Site from EPA to Wisconsin DNR jurisdiction and maximize the In-kind Contributions to the MKE20 Federal Agreement.
- 7.3. As part of the deferral discussed in 7.2, We Energies will enter into the Sediment Negotiated Agreement with the DNR that addresses contaminated sediments in the Kinnickinnic River that may be from the Milwaukee Solvay Coke & Gas Superfund Alternative Site. DNR will assist with this deferral as discussed in paragraph 3.6
 - (a) For the Car Ferry Slip We Energies will prepare a Remedial Actions Options Report and design remediation of the Car Ferry Slip as an In-kind Contribution, as indicated in the MKE20 Federal Agreement and paragraphs 1.2(e) and 7.1(c) of this agreement.
 - (b) Any other potential areas that may be from the Milwaukee Solvay Coke & Gas Superfund Alternative Site will be addressed as part of the larger AOC project under MKE20 Federal Agreement. GLNPO, with input from the NFS, would include potential Milwaukee Solvay Coke & Gas Superfund Alternative Site in a larger Feasibility Study of the Kinnickinnic River. A remedy would be selected, and Remedial Design would be conducted under the current MKE20 Federal Agreement. Contributions for the above are described in paragraph 8.1 and 8.2. DNR will assist in the characterization of these areas as described in paragraph 3.1.
- 7.4. When the MKE20 Federal Agreement is modified for remediation, We Energies will execute remediation of NAPL deposits A & B (as identified in the M&M FFS Figure 9c in Exhibit B) as an In-Kind Contribution to the agreement using the NR 700 series of Wis. Admin. Code.
- 7.5. Permits. We Energies agrees to sign, when appropriate for activities it undertakes as part of the MKE20 Federal Agreement, applications for local, state, and federal permits prepared under the MKE20 Federal Agreement or allow an authorized representative to sign on their behalf.

8. STIPULATIONS BY THE NONFEDERAL SPONSORS

- 8.1. The stipulations in this section are subject to the authorization of funding to construct the DMMF and completion of the Scope of Work in the MKE20 Federal Agreement to conduct the remedial actions proposed for the AOC.
- 8.2. The NFS stipulate that federal matching funds generated by each NFS's cash, overmatch or In-Kind Contributions are to be prioritized for use in areas determined to be of highest priority by the NFS. Priority areas will include potential contaminated sediment areas identified in BRRTs that may be

associated with the Milwaukee Solvay Coke & Gas Superfund Alternative Site and the former West Side MGP site. Priority areas may change as additional information is collected.

- (a) When the MKE20 Federal Agreement is modified for remediation and the future In-Kind contributions by We Energies for the remediation of the Car Ferry Slip and Third Ward MGP's sediment are included, as discussed in paragraph 7.4, the NFS estimate that there will be sufficient federal funds generated to remediate potential areas associated with the Milwaukee Solvay Coke & Gas Superfund Alternative Site and the former West Side MGP site.
- 8.3. Sediment investigation by DNR using EPA grant 00E02392 recently identified contamination in the South Menomonee Canal sediment consisting of elevated levels of PCBs, metals, and PAHs that are adjacent to We Energies Valley Power Plant. DNR established BRRTs 02-41-585377 for this area and will not determine attribution for this case. The NFS stipulate that remediation of the South Menomonee Canal will be performed as part of the larger project contemplated under larger MKE20 Federal Agreement with generated federal matching funds prioritized among the NFS.
- 8.4. The NFS stipulate that the proposed DMMF must have a financial benefit to the City.
- 8.5. The NFS stipulate that space for certain NFS use of the DMMF will be allocated before construction of the DMMF and be covered under a separate MKE-DMMF agreement, as discussed in paragraph 2.6.
- 8.6. The NFS stipulate that technical arguments as to the source or potential sources of PAHs on the Kinnickinnic River are no longer necessary for the purpose of defining We Energies contributions. We Energies will not present arguments to the DNR regarding items such as PAH forensics or background concentrations.
- 8.7. The NFS stipulate that in the event that the precedent condition stipulated in paragraph 8.1 as to "authorization of funding to construct the DMMF" is not achieved and all stipulations in subsequent paragraphs 8.2-8.6 are therefore void, federal matching funds generated by We Energies cash, overmatch or In-Kind Contributions are to be prioritized for use in areas determined solely by We Energies.

9. ADDITIONAL TERMS AND CONDITIONS

9.1. Dispute Resolution.

- (a) Any dispute regarding this Contribution Agreement shall be the subject of informal negotiations between the Parties. The period for informal negotiations shall not exceed forty-five (45) days from the time the dispute arises, unless it is extended by written agreement of the Parties. No lawsuit or proceeding arising under this Contribution Agreement may be filed until the 45-day period has elapsed except to the extent such lawsuit or proceeding seeks injunctive relief or the Parties agree to waive the 45-day period. The dispute shall be considered to have arisen when one Party sends the other Parties a written *Notice of Dispute*. Any informal resolution of a dispute shall be documented in writing by the Parties and provided to the project coordinators.

- (b) In the event that the Parties cannot resolve a dispute by informal negotiations after the forty-five (45) day period under the preceding paragraph, then either of the Parties to the dispute may initiate a civil proceeding in a court of appropriate jurisdiction to resolve such matter.
- (c) The invocation of dispute resolution procedures under this section shall not extend, postpone or affect in any way the obligation(s) of a Party under this Contribution Agreement, not directly in dispute, unless the other Party that is subject to the dispute agrees otherwise.

9.2. Submittals, Correspondence, Contacts. All documents submitted by the Parties, or any communications between the Parties, under the terms of this Contribution Agreement shall be addressed as follows:

- (a) To the DNR:

Scott Inman, P.E.
Contaminated Sediments Engineer
Remediation and Redevelopment
Wisconsin Department of Natural Resources
3911 Fish Hatchery Rd
Fitchburg, WI 73711
(608) 273-5613

- (b) To the City:

David Misky
Department of City Development
809 N Broadway #2
Milwaukee, WI 53202
(414) 286-8682
dmisky@milwaukee.gov

- (c) To the County:

Sarah Toomsen
Manager of Planning and Development
Milwaukee County Parks
9480 Watertown Plank Road
Wauwatosa, WI 53226
(414) 257-7389
Sarah.toomsen@milwaukeecountywi.gov

(d) To the MMSD:

Tom Chapman, P.E.
Senior Project Manager
Milwaukee Metropolitan Sewerage District
260 W. Seeboth Street
Milwaukee, WI 53204-1446
(414) 225-2154
tchapman@mmsd.com

(e) To We Energies:

Robert Paulson
Principal Environmental Consultant
WEC Energy Group – Business Services
333 Everett Street – A231
Milwaukee, WI 53203
(414) 221-3948
robert.paulson@we-energies.com

(f) Replacement of Named Contacts. In the event a contact named in this Section is no longer associated with the Project, the Party shall memorialize this change by submitting an updated contact list for the Party to all Parties in writing.

- 9.3. Effective Date. This Contribution Agreement shall be executed by the other Parties before being executed by DNR. When DNR executes this Contribution Agreement, DNR shall enter an effective date immediately below the DNR's signature which shall be the date of signature by the DNR. The DNR will mail a fully executed copy of the Agreement (first class postage prepaid) to each of the Parties and retain one copy for its records.
- 9.4. Indemnity, Duty to Defend, Attorney's Fees. Nothing in this Contribution Agreement, whether expressed or implied, shall be understood to give rise to any requirement or right for any Party to indemnify or hold harmless any other Party. Further, nothing in this Contribution Agreement shall give rise to any duty to defend or the responsibility for payment of attorney's fees by any Party with respect to any other Party.
- 9.5. Limit of Liability. In no event shall any Party be liable to the other or any third party in contract, tort or otherwise for incidental or consequential damages of any kind, including, without limitation, punitive or economic damages or lost profits, regardless of whether either Party shall be advised, shall have other reason to know in fact shall know of the possibility. The Parties each recognize and understand that they may be responsible for the consequences of its own acts, errors, or omissions and those of its employees, agents, boards, commissions, agencies, officers and representatives, including providing its own defense. In situations including joint liability, each Party shall be responsible for the consequences of its own acts, errors, or omissions and those of

its employees, agents, boards, commissions, agencies, officers and representatives. It is not the intent of the Parties to impose liability beyond that imposed by state statutes. This clause applies only to the actions of each Party pursuant to this Contribution Agreement and does not apply to actions or events that occur outside the scope of this Contribution Agreement.

- 9.6. No Admission of Liability. Pursuant to Wis. Stat. § 281.83(3)(a), if a Party provide funding for an activity that is part of the remedial action plan, that provision of funding is not evidence of liability or an admission of liability for any environmental contamination.
- 9.7. DNR Reservation to Take Action. Pursuant to Wis. Stat. § 281.83(3)(b), the acceptance by the DNR of funding from a Party for an activity that is part of a remedial action plan does not limit the ability of the DNR to take action against the Party if the DNR determines the Party is responsible, in whole or in part, for environmental contamination.
- 9.8. Amendments. This Contribution Agreement may be amended by mutual written agreement of the Parties. Any amendment of this Contribution Agreement shall be in writing, signed by all Parties, and have the date on which the last Party signed such amendment as the effective date.
- 9.9. Assignment. Except as expressly provided herein, no Party shall have the right to assign any part of its obligations under this Contribution Agreement unless they follow the procedure outlined in Section 9.8 regarding Amendments of this Contribution Agreement.
- 9.10. Termination or Suspension.
 - (a) Notice. This Contribution Agreement may be terminated only upon written Agreement of the Parties or otherwise for cause in accordance with applicable law. Any Party that desires to terminate this Contribution Agreement for cause shall provide written notice, signed by such Party's signatory to this Contribution Agreement or their successor in office. Upon receiving such notice, a Party may then invoke the dispute resolution process set forth in Section 9.1 of this Contribution Agreement.
 - (b) On Completion. Unless terminated at an earlier date by the Parties, or otherwise extended by the Parties, this Contribution Agreement shall expire upon completion of all obligations under this Contribution Agreement and written acknowledgement thereof by the Parties to this Contribution Agreement.
 - (c) MKE20 Federal Agreement with GLNPO. The project may be terminated or suspended by GLNPO in accordance with Article XIV of the MKE20 Federal Agreement, specifically:
 - i) If the NFS fail to fulfill their obligations under the MKE20 Federal Agreement, or if the Director of GLNPO, in his sole discretion, determines it would be impractical to continue work for any reason, but particularly if continuing the work is not expected to achieve the objectives of the Project, the Director shall terminate the MKE20 Federal Agreement and therefore this Contribution Agreement or suspend future performance under the MKE20 Federal Agreement unless he determines that continuation of work on the Project is in the interest of

the United States, or is necessary to satisfy agreements with any other non-federal interests in connection with the Project.

- ii) If GLNPO does not receive annual appropriations sufficient to meet its share of scheduled expenditures for the Project for the then-current or upcoming federal fiscal year, GLNPO shall notify the NFS in writing, and GLNPO may terminate this both this Contribution Agreement and the MKE20 Federal Agreement or suspend future performance under this Contribution Agreement. If GLNPO suspends future performance pursuant to this Paragraph, the suspension shall remain in effect until GLNPO receives sufficient appropriations or until GLNPO terminates this Contribution Agreement, whichever occurs first.
 - iii) If GLNPO terminates this Contribution Agreement pursuant to this Article, the Parties shall conclude their activities relating to the Project and proceed to a final accounting pursuant to the final accounting by GLNPO.
 - iv) Any termination of the MKE20 Federal Agreement or suspension of future performance under the MKE20 Federal Agreement shall not relieve the Parties of liability for any obligation previously incurred. Interest shall accrue on any delinquent payment owed by the NFS at a rate, to be determined by the Secretary of the Treasury, equal to 150% of the average bond equivalent rate of the 13-week Treasury bills auctioned immediately before the payment became delinquent, or auctioned immediately before the beginning of each additional three month period if the period of delinquency exceeds three months.
- (d) Continued Performance. The provisions of this Contribution Agreement that require performance after the expiration or termination of this Contribution Agreement shall remain in force notwithstanding the expiration or termination of this Contribution Agreement.

- 9.11. Department Authority Preserved. Subject to the provisions of this Agreement, and the provisions of the MKE20 Federal Agreement, nothing in this Contribution Agreement shall be construed to limit the DNR's authority in any way.
- 9.12. Waiver. Failure of a Party to insist on strict compliance with any of the terms and conditions of this Contribution Agreement shall not be deemed a waiver of such terms and conditions, or of any similar right or power hereunder at any subsequent time.
- 9.13. Public Records. Pursuant to Wis. Stat. §§ 19.31 to 19.39 (Wisconsin's Public Records Laws), unless specifically exempt from disclosure under applicable state law, all records, as defined in Wis. Stat. § 19.32(2), generated by the Parties and submitted to the DNR under the terms of this Contribution Agreement, disclosure of any records labeled as confidential shall be subject to Wisconsin's Public Records Law.

EXHIBITS

- Exhibit A MKE20 Federal Agreement
- Exhibit B M&M FFS Figure 9
- Exhibit C EPA Action Plan III
- Exhibit D Memorandum of Understanding Between the EPA and DNR
 Solvay Coke Superfund Alternative Site, Milwaukee, Wisconsin, signed October 10, 2019

The Parties, whose signatures appear below, hereby agree to the terms of this Contribution Agreement.

Each person signing this Contribution Agreement represents and warrants that he or she has been duly authorized by the DNR, the City, the County, MMSD and We Energies to execute and legally bind the respective Party to the terms of this Contribution Agreement. This Contribution Agreement may be signed in counterparts which, when taken together, shall constitute one in the same document.

Non-Federal Sponsors Contribution Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern

By: _____

Date: _____

Preston D. Cole

DNR Secretary

Wisconsin Department of Natural Resources

Non-Federal Sponsors Contribution Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern.

By: _____

Date: _____

Tom Barrett

Mayor

City of Milwaukee

By: _____

Date: _____

James Owczarski

City Clerk

City of Milwaukee

By: _____

Date: _____

Aycha Sawa

Comptroller

City of Milwaukee

Non-Federal Sponsors Contribution Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern.

By: _____

Date:

Guy Smith

Executive Director

Milwaukee County Parks

Non-Federal Sponsors Contribution Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern.

By: _____

Date:

Kevin L. Shafer, P.E.

Executive Director

Milwaukee Metropolitan Sewerage District

Non-Federal Sponsors Contribution Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern.

By: _____

Date:

Elizabeth Stueck-Mullane

Vice President Environmental

Wisconsin Gas LLC and Wisconsin Electric Power Company dba We Energies

Exhibit A

MKE20 Federal Agreement

GREAT LAKES LEGACY ACT PROJECT AGREEMENT
BETWEEN
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AND
THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES,
CITY OF MILWAUKEE, MILWAUKEE COUNTY PARKS,
MILWAUKEE METROPOLITAN SEWERAGE DISTRICT AND
WE ENERGIES
FOR
FOCUSED FEASIBILITY STUDY, PRE-DESIGN INVESTIGATION
& REMEDIAL DESIGN
OF IMPACTED SEDIMENTS, THE REMEDIAL DESIGN OF THE PROPOSED DREDGE
MATERIAL MANAGEMENT FACILITY AND THE
REMOVAL OF PCB CONTAMINANT SOURCE MATERIAL IN
THE MILWAUKEE ESTUARY AREA OF CONCERN
MILWAUKEE, WISCONSIN

The United States Environmental Protection Agency (U.S. EPA), represented by the Great Lakes National Program Office (GLNPO), and the Wisconsin Department of Natural Resources (DNR), the City of Milwaukee, Milwaukee County Parks, Milwaukee Metropolitan Sewerage District (MMSD) and Wisconsin Gas LLC and Wisconsin Electric Power Company, dba collectively as We Energies (the Non-Federal Sponsors), are entering into this Project Agreement (Agreement) to conduct Focused Feasibility Studies, Pre-Design Investigations and Remedial Design of Impacted Sediments, the Remedial Design of the proposed Dredge Material Management Facility (MKE-DMMF), the Removal of the PCB Contaminant Source Material, all of which are in the Milwaukee Estuary Area of Concern in Milwaukee, Wisconsin, as more fully described in this Agreement (the Project).

The Project, as defined in Paragraph 1.h of this Agreement, is a qualified project under the Great Lakes Legacy Act (GLLA), codified as amended at 33 U.S.C. § 1268(c)(11). All of the areas that are part of the Project are in in the Milwaukee Estuary Area of Concern, and the Project is to be carried out within the Milwaukee Estuary Area of Concern, which is wholly within the United States. The Project will complete Focused Feasibility Studies, Pre-Design Investigations and Remedial Designs of impacted sediments, the Remedial Design of the proposed MKE-DMMF at the Port of Milwaukee, and the removal of the PCB contaminant source material. The Non-Federal Sponsors submitted an application to GLNPO for the Milwaukee Estuary Area of Concern dated June 6, 2019. The Project is described more completely in the attached Scope of Work.

Section 118(c)(11) of the Clean Water Act codifies the Great Lakes Legacy Act (GLLA),

33 U.S.C. § 1268(c)(11), and authorizes GLNPO to monitor and evaluate, remediate, or prevent further or renewed contamination of sediment in Areas of Concern. Under Section 118(c)(11)(D)(iii), 33 U.S.C. § 1268(c)(11)(D)(iii), the Non-Federal Sponsors must enter into a written project agreement under which it agrees to carry out its responsibilities and requirements for the Project. Section 118(c)(11)(E), 33 U.S.C. § 1268(c)(11)(E), specifies the non-Federal share of the cost of a project carried out under the GLLA, including, but not limited to: the value and types of any in-kind contribution of material or services that are integral to the Project and are to be provided by the Non-Federal Sponsors; limitations on the credit for any such in-kind contributions provided by the Non-Federal Sponsors; and the Non-Federal Sponsors' responsibility for 100% of the cost of long-term operation and maintenance of the Project.

This Agreement under the GLLA to evaluate contaminated sediments and to prevent further or renewed contamination of sediments will facilitate removing Beneficial Use Impairments and delisting an Area of Concern. This work supports Objective 1.2 of U.S. EPA's Strategic Plan for 2018-2022 to provide for clean and safe water by sustainably managing the GLLA program to support aquatic ecosystems and recreational, economic, and subsistence activities. In addition, the work under this Agreement supports the following two Measures of Progress from the Great Lakes Restoration Initiative Action Plan II: all necessary management actions in Areas of Concern have been taken; and removal of Beneficial Use Impairments in Areas of Concern.

The Estimated Total Project Costs of the Project is \$29,285,715. The Non-Federal Sponsors' share of the costs of the Project is 35%.

GLNPO and the Non-Federal Sponsors have the authority and capability to perform as set forth in this Agreement and intend to cooperate in cost-sharing and financing of the Project according to the terms of this Agreement.

NOW, THEREFORE, GLNPO and the Non-Federal Sponsors agree as follows:

ARTICLE I - DEFINITIONS AND GENERAL PROVISIONS

1. For purposes of this Agreement:

- a. "Article" means a portion of this Agreement identified by roman numeral.
- b. "Estimated Total Project Costs" means \$29,285,715. The Estimated Total Project Costs for the Focused Feasibility Studies, pre-design investigations and remedial design for the various areas on as identified in the SOW/Map is \$13,000,000 to \$16,000,000, and the Estimated Total Project Costs for the source control at Basin H is \$6,200,000. The Estimated Total Project Costs may be increased by 5% as a contingency by the mutual agreement of GLNPO and the Non-Federal Sponsors without having to sign a modification to this Agreement.

c. "Fiscal Year" means one fiscal year of GLNPO. The GLNPO fiscal year begins on October 1 and ends on September 30.

d. "GLLA" means the Great Lakes Legacy Act, 33 U.S.C. § 1268(c)(11), as amended.

e. "In-Kind Contributions" means the value, as established by GLNPO, of Project related goods and services provided by the Non-Federal Sponsors that GLNPO determines are integral to the Project, including, but not limited to: construction and operation of Project elements, airspace for the disposal of contaminated source material and dredged sediment in an excavated material disposal facility, construction materials, equipment, design or engineering services, laboratory services and staff charges; and specifically includes but is not limited to Basin H source control, as-built evaluation, utility locate, Grand Trunk sewer assessment and clean-out source control, Solvay car ferry design, NAPL remedial design, proposed dredge material management facility design and a potential credit under Section 118(E)(iii) for work done by WE Energies.

f. "Non-federal proportionate share" means the ratio of the Non-Federal Sponsors' total cash and in-kind contribution required according to this Agreement to the total financial obligations for the Project, as projected by GLNPO.

g. "Paragraph" means a portion of this Agreement identified by Arabic numeral.

h. "Project" means work set forth in the Scope of Work, which is attached hereto and incorporated by reference, including completion of Focused Feasibility Studies, Pre-Design Investigations and Remedial Designs of impacted sediments, the Remedial Design of the MKE-DMMF at the Port of Milwaukee, and the Removal of the PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern in Milwaukee, Wisconsin.

i. "Project period" means the time from the date the Project Agreement first becomes effective to the date that GLNPO notifies the Non-Federal Sponsors in writing of GLNPO's determination that the Project is complete and can be closed out or is otherwise terminated.

j. "Scope of Work" means the Scope of Work for Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Remaining Impacted Sediments, Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern in Milwaukee, Wisconsin & attached hereto and incorporated by reference.

k. "Total Project Costs" means all costs incurred by the Non-Federal Sponsors and/or GLNPO according to this Agreement that are directly related to the work on the Project prior to any operation and maintenance costs. Subject to this Agreement, the term includes, but

is not limited to: the value of the Non-Federal Sponsors' in-kind contributions; GLNPO's engineering and design costs during the Project; investigation costs to identify the existence and extent of hazardous substances; actual Project costs; GLNPO's costs of contract dispute settlements or awards; and audit costs pursuant to Article X of this Agreement. The term does not include any financial obligations for the operation and maintenance of the Project; or any costs of dispute resolution under Article VII of this Agreement. This term also does not include GLNPO's direct labor and indirect costs because Congress has directed EPA "to exercise maximum flexibility to minimize non-Federal match requirements." H.R. Rep. No. 112-151 at 65 (2011).

ARTICLE II - OBLIGATIONS OF GLNPO AND THE NON-FEDERAL SPONSORS

2. Subject to receiving funds appropriated by the United States Congress, GLNPO shall conduct its assigned portions of the Project by applying those procedures usually applied to Clean Water Act projects, pursuant to federal laws, regulations, and policies.

3. By signing this Agreement, each Non-Federal Sponsor certifies that its financial management systems meet the following standards:

a. Financial reporting. Accurate, current, and complete disclosure of the financial results of financially assisted activities is made according to the financial reporting requirements of this Agreement.

b. Accounting records. The Non-Federal Sponsor maintains records which adequately identify the source and application of funds provided for financially-assisted activities. These records contain information pertaining to authorizations, obligations, unobligated balances, assets, liabilities, outlays or expenditures, and income.

c. Internal control. Effective control and accountability is maintained for all Project Agreement cash, real and personal property, and other assets. The Non-Federal Sponsor adequately safeguards all such property and assures that it is used solely for authorized purposes.

d. Budget control. For each Project Agreement, the Non-Federal Sponsor compares actual expenditures or outlays with budgeted amounts. Financial information is related to performance or productivity data, including developing unit cost information whenever appropriate or specifically required in the Project Agreement. If unit cost data are required, estimates based on available documentation will be accepted whenever possible.

e. Allowable cost. The parties agree that the regulations at 2 CFR Part 200 and the terms of this Agreement will govern in determining the reasonableness, allowability, and

allocability of costs.

f. Source documentation. The Non-Federal Sponsor's accounting records are supported by such source documentation as paid bills, payrolls, time and attendance records, contract award documents, etc.

4. The Non-Federal Sponsors shall contribute a share of the Total Project Costs as follows:

a. The parties have estimated the amount of the Estimated Total Project Costs to be provided by the Non-Federal Sponsors, which may include In-Kind Contributions that are determined to be integral to the Project. In-Kind Contributions can include, but are not limited to the following:

- (1) Lands;
- (2) Equipment;
- (3) Labor;
- (4) Airspace for the disposal of dredged sediment; and
- (5) Work or services performed by the Non-Federal Sponsors as set forth in the Statement of Work for the Project.

b. If the amount of the In-Kind Contributions which the Non-Federal Sponsors provides to the Project is less than 35% of the Total Project Costs, the Non-Federal Sponsors shall provide an additional cash contribution, pursuant to Paragraph 21, in the amount necessary to make its total contribution equal to 35%.

5. GLNPO shall perform a final accounting according to Paragraph 20 after work is completed on the Project to determine the value of the Non-Federal Sponsors' contributions under this Agreement to determine whether the Non-Federal Sponsors have met their financial obligations under this Agreement.

6. The Non-Federal Sponsors shall not use federal program funds to meet any of its obligations for the Project under this Agreement.

7. Each Non-Federal Sponsor certifies that the Non-Federal Sponsor and, to its knowledge, any of its contractors who will execute work under this Agreement:

- a. Are not presently or proposed to be debarred or suspended, declared ineligible,

or voluntarily excluded from federal, state or local transaction;

b. Have not within a three year period preceding this Agreement been convicted of or had a civil judgment rendered against them for (i) fraud or commission of a criminal offense in connection with obtaining, attempting to obtain, or performing a public transaction or contract under a public transaction, (ii) violation of federal or state antitrust laws, or (iii) embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a public entity with commission of any of the offenses enumerated under Paragraph 7.b; and

d. Have not within the preceding three years had a public transaction terminated for cause or default.

8. The Non-Federal Sponsors will ensure that projects involving collection of environmental data (measurements or information that describe environmental processes, location, or conditions; ecological or health effects and consequences; or the performance of environmental technology) meet the American National Standard requirements and guidance for Quality Management Systems for Environmental Information and Technology Programs; ASQ/ANSI E4:2014, or most current version. "Quality System Documentation" includes a Quality Management Plan (QMP), applicable project-level quality assurance documentation Quality Assurance Project Plan (QAPP), or other documentation which demonstrates compliance with ASQ/ANSI E4:2014. The Non-Federal Sponsors will ensure that the project follows requirements of EPA Quality Policy 2105/2106 and applicable guidance. The Non-Federal Sponsors will ensure that any primary or secondary environmental data collection supporting GLLA projects/program meet requirements as outlined in the most current version of the "GLLA QA Considerations," and follow GLLA program-specific requirements outlined in the GLLA QMP and GLLA Data Reporting Standard (DRS).

ARTICLE III – ACCESS, LANDS, EASEMENTS, AND RIGHTS-OF-WAY

9. GLNPO, after consulting with the Non-Federal Sponsors, shall determine the access, lands, easements, or rights-of-way necessary for conducting the Project, including those necessary for completion of the Project. Before construction begins, the Non-Federal Sponsor shall acquire all access agreements, lands, easements, or rights-of-way necessary for the construction, as set forth in the Statement of Work for the Project.

10. Until GLNPO furnishes the Non-Federal Sponsors with the results of the final accounting pursuant to Paragraph 20, the Non-Federal Sponsors in a timely manner shall provide GLNPO the documents that are necessary for it to determine the value of any contribution

provided pursuant to Paragraph 9. Upon receiving these documents, GLNPO shall afford credit for the value of the contribution according to Article IV.

ARTICLE IV - CREDIT FOR VALUE OF LANDS, EASEMENTS AND RIGHTS-OF-WAY

11. The Non-Federal Sponsors shall receive credit according to this Article for the value of the lands, easements, or rights-of-way that it provides pursuant to Article III. However, the Non-Federal Sponsors shall not receive credit for the value of any lands, easements, or rights-of-way that it provided previously for another federal project. The Non-Federal Sponsors also shall not receive credit for the value of lands, easements, or rights-of-way that were acquired or provided using federal program funds.

12. For the sole purpose of affording credit according to this Agreement, the value of lands, easements, and rights-of-way, including those necessary for the borrowing of material, or the disposal of dredged or excavated material, shall be the fair market value of the real property interests, plus certain incidental costs of acquiring those interests, as determined according to this Paragraph.

a. Date of Valuation. The fair market value of lands, easements, or rights-of-way owned by the Non-Federal Sponsors on the effective date of this Agreement shall be the fair market value of the real property interests on the date the Non-Federal Sponsors authorize GLNPO to enter the property. The fair market value of lands, easements, or rights-of-way acquired by the Non-Federal Sponsors after the effective date of this Agreement shall be the fair market value of the real property interests at the time the interests are acquired.

b. General Valuation Procedure. Except as provided in Paragraph 12.c, the fair market value of lands, easements, or rights-of-way shall be determined according to Paragraph 12.b.i, unless a different amount is determined later to represent fair market value according to Paragraph 12.b.ii.

i. The Non-Federal Sponsors shall obtain, for that real property interest, an appraisal prepared by a qualified appraiser who is acceptable to the Non-Federal Sponsors and GLNPO. The appraisal shall be prepared according to the applicable rules of just compensation, as specified by GLNPO. The fair market value shall be the amount in the Non-Federal Sponsors' appraisal, if GLNPO approves the appraisal. If GLNPO does not approve the Non-Federal Sponsors' appraisal, GLNPO may obtain an appraisal, and the fair market value shall be the amount in GLNPO's appraisal, if the Non-Federal Sponsors approves the appraisal. If the Non-Federal Sponsors do not approve GLNPO's appraisal, GLNPO, after consultation with the Non-Federal Sponsors, shall consider both parties' appraisals and shall determine the fair market value based on both appraisals.

ii. Where the amount paid or proposed to be paid by the Non-Federal Sponsors for the real property interest exceeds the amount determined pursuant to Paragraph 12.b.i, GLNPO, at the request of the Non-Federal Sponsors, shall consider all factors relevant to determining fair market value and, in its sole discretion, after consulting with the Non-Federal Sponsors, may approve in writing an amount greater than the amount determined pursuant to Paragraph 12.b.i, but not to exceed the amount actually paid or proposed to be paid. If GLNPO approves such an amount, the fair market value shall be the lesser of the approved amount or the amount paid by the Non-Federal Sponsors, but no less than the amount determined pursuant to Paragraph 12.b.i.

c. Waiver of Appraisal. GLNPO may waive the requirement for an appraisal to determine the value of a real property interest for crediting purposes if it determines that an appraisal is unnecessary because the valuation is uncomplicated and that the estimated fair market value of the real property interest is \$10,000 or less based upon a review of available data. In such event, GLNPO and the Non-Federal Sponsors must agree in writing to the value of the real property interest in an amount not to exceed \$10,000.

ARTICLE V - PROJECT COORDINATION TEAM

13. To provide for consistent and effective communication, the Non-Federal Sponsors and GLNPO, not later than 30 business days after the effective date of this Agreement, shall appoint named senior representatives to a Project Coordination Team. The Project Coordination Team shall meet or talk regularly until the end of the Project period. GLNPO's Project Manager and a counterpart named by the Non-Federal Sponsors shall co-chair the Project Coordination Team.

14. GLNPO's Project Manager and the Non-Federal Sponsors' counterpart shall keep the Project Coordination Team informed of Project progress and significant pending issues and actions, and shall seek the views of the Project Coordination Team on matters that the Project Coordination Team generally oversees.

15. Until Project completion, the Project Coordination Team shall generally oversee the Project including, but not necessarily limited to, matters related to: design; plans and specifications; scheduling; real property, relocation, and removal requirements; real property acquisition; contract costs; the application of and compliance with the Davis-Bacon Act, Contract Work Hours and Safety Standards Act and the Copeland Anti-Kickback Act for relocations; GLNPO's cost projections; final inspection of the entire Project or functional portions of the Project; preparation of the management plan for proposed dredged or excavated material disposal; and other Project-related matters. The Project Coordination Team also shall generally oversee the coordination of Project schedules.

16. The Project Coordination Team may make recommendations to the Project Managers on Project-related matters that the Project Coordination Team generally oversees, including suggestions to avoid potential sources of dispute. GLNPO and the Non-Federal Sponsors in good faith shall consider the recommendations of the Project Coordination Team. GLNPO and the Non-Federal Sponsors may accept or reject, in whole or in part, the Project Coordination Team's recommendations.

ARTICLE VI - METHOD OF PAYMENT

17. As of the effective date of this Agreement, the Estimated Total Project Costs are \$29,285,715, and the Non-Federal Sponsors contribution required under Paragraph 4 is projected at \$10,250,000. An estimate of the projected contributions by each of the Non-Federal Sponsors is included in the attached SOW on page 6. These amounts are subject to adjustment by GLNPO and are not to be construed as the total financial responsibilities of GLNPO and the Non-Federal Sponsors if a modification to this Agreement is signed by GLNPO and the Non-Federal Sponsors that increases the Estimated Total Project Costs.

18. In providing its required share of the Total Project Costs required by Paragraph 4, the Non-Federal Sponsors shall provide In-Kind Contributions and/or cash payment to the Project according to the provisions of this Paragraph.

a. Since the Non-Federal Sponsors are meeting some of their cost share requirements through In-Kind Contributions, the Non-Federal Sponsors shall submit detailed documentation of the work it performs under this Project. The Non-Federal Sponsors shall provide GLNPO with quarterly reports beginning with the first full three-month period after the effective date of this Agreement. The quarterly report shall, at a minimum, include the time period for which costs were incurred, total amount of costs incurred, a summary of work accomplished by the Non-Federal Sponsors in the previous quarter on each element of the Project, and a breakout of costs incurred to date in a tabular format. This report shall also include detailed documentation and certification of the Non-Federal Sponsors' In-Kind Contributions made to meet its cost share requirement. The type of records that the Non-Federal Sponsors must submit include, but are not limited to, payroll records to support staff time, a calculated indirect cost rate to document indirect costs, travel vouchers and receipts, invoices that support contractor costs, and proof of payment documentation (such as SAP screen shots and/or Oracle payment history reports). If an entity other than the Non-Federal Sponsor is submitting documentation of In-Kind Contributions made to satisfy any portion of the Non-Federal Sponsors' cost share requirement, then the certification shall be signed and submitted by the entity that incurred those costs.

The Non-Federal Sponsors or other entity submitting documentation of In-Kind Contributions made to satisfy any portion of the Non-Federal Sponsors' cost share requirement shall sign and submit the following certification with each quarterly report:

I, [insert name of person], [insert name of company/organization] certify that I reviewed all the cost documentation of costs that are being claimed for the in-kind cost share of the [insert name] GLLA project. I verified the work prior to paying these costs. I have also verified that these costs have been paid.

I certify under penalty of law that I have examined and am familiar with the documents and information which support the statements made in this certification. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to 18 U.S.C. §§ 1001 and 1341.

Upon execution of the Project Agreement, the GLNPO Project Manager will provide the Non-Federal Sponsors with guidance concerning documentation of In-Kind Contributions. If the Non-Federal Sponsors fail to submit a quarterly report, GLNPO may send the Non-Federal Sponsors written notice and a request to submit the report. The Non-Federal Sponsors shall submit the quarterly report within 60 days of receiving the written notice from GLNPO. If the Non-Federal Sponsors fail to submit the quarterly report within 60 days following the written notice and request, GLNPO may disallow those In-Kind Contributions claimed by the Non-Federal Sponsors during that three-month period and GLNPO may not count such costs toward the Non-Federal Sponsors cost share requirement.

b. Since the Non-Federal Sponsor DNR is meeting some of its cost share requirements through cash payments/contributions, the Non-Federal Sponsor DNR shall pay in the manner outlined in Paragraph 21, below within 30 days of an invoice provided to the Non-Federal Sponsor by the EPA.

19. If at any time GLNPO determines that an increase in the Estimated Total Project Costs is necessary to complete the Project and additional funds or In-Kind Contributions will be needed from the Non-Federal Sponsors to cover the non-federal proportionate share of the increased Estimated Total Project Costs, GLNPO shall notify the Non-Federal Sponsors in writing of the additional funds required and shall explain why they are required. If the parties sign a modification to this Agreement to increase the Estimated Total Project Costs the Non-Federal Sponsors, within 90 calendar days from receipt of the notice shall pay the additional cash contribution, or shall make the additional In-Kind Contributions required to meet the non-federal proportionate share, in the manner described in Paragraph 18. GLNPO may continue project expenditures with or without a modification to this Agreement if the Director of GLNPO

determines in writing that project expenditures must proceed to demobilize personnel and equipment for the orderly wind down of the Project to comply with law or to protect human life or property.

20. Upon completion of the Project or termination of this Agreement before Project completion and upon resolution of all relevant proceedings, claims, and appeals, GLNPO shall conduct a final accounting, based primarily on the information provided by the Non-Federal Sponsors under Paragraph 18 or at the request of the GLNPO Program Manager, and give the Non-Federal Sponsors the final accounting results. GLNPO may perform an interim accounting on its own or if requested by the Non-Federal Sponsors.

a. GLNPO's final accounting shall determine the Total Project Cost, each party's total contribution toward the Project, and measure that contribution against each party's required share for the Project.

b. If the final accounting shows that the Non-Federal Sponsors' total contribution is less than its required share of the Total Project Costs, the Non-Federal Sponsors shall within 90 calendar days after receipt of written notice, pay the amount necessary to meet its required share by delivering a check payable in the manner described in Paragraph 21, below.

c. If the final accounting shows that the Non-Federal Sponsors' total contribution is more than its required share of the Total Project Costs, the Non-Federal Sponsors shall receive a credit for the Non-Federal share of additional work toward the Project including, but not limited to, a remedial design and/or remedial action.

21. In the event that the Non-Federal Sponsors have not provided enough funding to meet its required proportionate share of Total Project Costs, GLNPO will provide the Non-Federal Sponsors with an invoice for the balance required and the Non-Federal Sponsors shall submit a check, made payable to the order of the "Treasurer, United States of America," to the address specified on the invoice. The check shall contain a notation referencing a Budget Organization account number that GLNPO shall provide after this Agreement is executed. In the case of an Electronic Fund Transfer (EFT), the Non-Federal Sponsors shall contact EPA to obtain the appropriate instructions on payment submittal.

ARTICLE VII - DISPUTE RESOLUTION

22. Unless otherwise expressly provided for in this Agreement, the dispute resolution procedures of this Article are the exclusive mechanism to resolve disputes arising under or with respect to this Agreement.

23. Any dispute which arises under or with respect to this Agreement initially shall be

the subject of informal negotiations between the parties to the dispute. The period for informal negotiations shall not exceed 20 business days from the time the dispute arises, unless extended by written agreement of the parties to the dispute. The informal dispute period arises when the party not in dispute receives the other party's written notice of dispute.

24. Statements of Position.

a. If the parties cannot resolve a dispute by informal negotiations under the preceding Paragraph, the position advanced by GLNPO shall be binding unless, within 10 business days after the conclusion of the informal negotiations, the Non-Federal Sponsors invoke the formal dispute resolution procedures of this Article by serving on GLNPO a written statement of position on the matter in dispute. The statement of position shall include, but is not limited to, any factual data, analysis, or opinion supporting that position and any supporting documentation relied upon by the Non-Federal Sponsors.

b. Within 30 business days after receiving the Non-Federal Sponsors' statement of position, GLNPO shall serve on the Non-Federal Sponsors its statement of position, including, but not limited to, any factual data, analysis, or opinion supporting that position and all supporting documentation relied upon by GLNPO. Within 20 business days after receiving GLNPO's statement of position, the Non-Federal Sponsors may submit a reply.

c. GLNPO shall maintain an administrative record of the dispute that contains all statements of position, including supporting documentation, submitted pursuant to this Paragraph. Where appropriate, GLNPO may allow submission of supplemental statements of position by the parties to the dispute.

d. The Director of GLNPO will issue a final administrative decision resolving the dispute based on the administrative record described above. This decision shall bind the Non-Federal Sponsors.

ARTICLE VIII - OPERATION AND MAINTENANCE

25. Subject to applicable federal laws and regulations, the Non-Federal Sponsors, at no cost to GLNPO, shall operate and maintain the elements of the Project constructed pursuant to this Agreement in a manner compatible with the authorized purposes of the Project including the operation and maintenance of the dredged sediment from the Project. The Non-Federal Sponsors shall be responsible for taking all actions necessary to undertake the operation and maintenance for the Project as set forth in the attached SOW.

26. The Non-Federal Sponsors authorize GLNPO to enter, at reasonable times and in a reasonable manner, upon property that the Non-Federal Sponsors own or control for the purpose of monitoring the effectiveness of the operation and maintenance of the Project. However,

nothing in this Agreement conveys to GLNPO any interest in real property owned or controlled by a Non-Federal Sponsor.

27. The Non-Federal Sponsors authorize GLNPO or its agent to perform all activities on the lands, easements, and rights-of-way provided by the Non-Federal Sponsors to enable the disposal of dredged or excavated material that, in GLNPO's sole discretion, are necessary for operating, maintaining, or managing the disposal facilities including, but not necessarily limited to, construction, operation, and maintenance of the dredged or excavated material disposal facilities; and disposal of dredged or excavated material associated with the construction, operation, and maintenance of the Project.

ARTICLE IX - SEVERABILITY CLAUSE

28. If a court issues an order that invalidates any provision of this Agreement, the parties shall remain bound to comply with all provisions of this Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.

ARTICLE X - MAINTENANCE OF RECORDS AND AUDIT

29. GLNPO and the Non-Federal Sponsors shall maintain such books, records, documents, or other evidence related to this Project and the work performed for at least five years after the completion of the Final Accounting discussed in Paragraph 20, above. To the extent permitted under applicable federal laws and regulations, GLNPO and the Non-Federal Sponsors shall each allow the other to inspect the books, records, documents, or other evidence.

30. The parties agree that certain Non-Federal Sponsors including DNR, City of Milwaukee, Milwaukee County Parks, and MMSD are responsible for complying with the Single Audit Act Amendments of 1996, 31 U.S.C. §§ 7501-7507, as implemented by Office of Management and Budget (OMB) at 2 CFR Part 200 Subpart F. The Non-Federal Sponsors shall provide to GLNPO Single Audit Act reports for each year during which work was performed under this Project Agreement within 30 days of the availability of that report. Upon request of the Non-Federal Sponsors and to the extent permitted under applicable federal laws and regulations, GLNPO shall give the Non-Federal Sponsors and independent auditors any information necessary to enable an audit of the Non-Federal Sponsors' activities under this Agreement. The costs of any non-federal audits performed pursuant to this Paragraph before GLNPO furnishes the Non-Federal Sponsors with the results of the final accounting shall be allocated according to the provisions of 2 CFR Part 200, and the costs that are allocated to the Project shall be included in Total Project Costs and shared according to the provisions of this Agreement.

31. The parties agree that the Non-Federal Sponsor We Energies is responsible for complying with any auditing requirements imposed upon its organization. As part of this Project

Agreement, We Energies agrees to provide GLNPO with audited financial statements for each year during which work was performed under this Project Agreement within 30 days of the availability of those statements. Upon request of We Energies and to the extent permitted under applicable federal laws and regulations, GLNPO shall give We Energies and independent auditors any information necessary to enable an audit of We Energies' activities under this Agreement. The costs of any non-federal audits performed pursuant to this Paragraph before GLNPO furnishes We Energies with the results of the final accounting shall be allocated according to the provisions of 2 CFR Part 200, and the costs that are allocated to the Project shall be included in Total Project Costs and shared according to the provisions of this Agreement.

32. In accordance with 31 U.S.C. § 7503, GLNPO may conduct audits in addition to any audit that the Non-Federal Sponsors already conduct. The costs of GLNPO audits performed pursuant to this Paragraph before GLNPO furnishes the Non-Federal Sponsors with the results of the final accounting shall be included in the Total Project Costs, and shared according to the provisions of this Agreement.

ARTICLE XI - FEDERAL LAWS AND REGULATIONS

33. In the exercise of their respective rights and obligations under this Agreement, the Non-Federal Sponsors and GLNPO agree to comply with all applicable federal laws and regulations, including, but not limited to environmental laws such as the Endangered Species Act, 16 U.S.C §1531 *et seq.*

ARTICLE XII - RELATIONSHIP OF PARTIES

34. In the exercise of their respective rights and obligations under this Agreement, GLNPO and the Non-Federal Sponsors each act in an independent capacity, and neither is considered the officer, agent, representative, or employee of the other.

35. In the exercise of their rights and obligations under this Agreement, neither party shall provide, without the consent of the other party, any contractor with a release that waives or purports to waive any rights the other party may have to seek relief or redress against that contractor either pursuant to any cause of action that the other party may have for violation of the law.

ARTICLE XIV - TERMINATION OR SUSPENSION

36. If the Non-Federal Sponsors fail to fulfill their obligations under this Agreement, or if the Director of GLNPO, in his sole discretion, determines it would be impractical to continue work for any reason, but particularly if continuing the work is not expected to achieve the objectives of the Project, the Director shall terminate this Agreement or suspend future performance under this Agreement unless he determines that continuation of work on the Project

is in the interest of the United States, or is necessary to satisfy agreements with any other non-federal interests in connection with the Project.

37. If GLNPO does not receive annual appropriations sufficient to meet its share of scheduled expenditures for the Project for the then-current or upcoming fiscal year, GLNPO shall notify the Non-Federal Sponsors in writing, and GLNPO may terminate this Agreement or suspend future performance under this Agreement. If GLNPO suspends future performance pursuant to this Paragraph, the suspension shall remain in effect until GLNPO receives sufficient appropriations or until GLNPO terminates this Agreement, whichever occurs first.

38. If GLNPO terminates this Agreement pursuant to this Article, both parties shall conclude their activities relating to the Project and proceed to a final accounting pursuant to Paragraph 20.

39. Any termination of this Agreement or suspension of future performance under this Agreement shall not relieve the parties of liability for any obligation previously incurred. Interest shall accrue on any delinquent payment owed by the Non-Federal Sponsors at a rate, to be determined by the Secretary of the Treasury, equal to 150 percent of the average bond equivalent rate of the 13-week Treasury bills auctioned immediately before the payment became delinquent, or auctioned immediately before the beginning of each additional 3-month period if the period of delinquency exceeds 3 months.

ARTICLE XV - HISTORIC PRESERVATION

40. The parties shall evaluate the Project's impact on historic property. The costs of identification, survey and evaluation of historic properties shall be included in Total Project Costs and shared according to this Agreement.

ARTICLE XVI - NOTICES

41. Unless otherwise specified here, any notice, request, demand or other communication required or permitted under this Agreement between the parties shall be in writing and addressed as follows:

to the Non-Federal Sponsor DNR:

Scott Inman, P.E.
Contaminated Sediments Engineer
Remediation and Redevelopment
Wisconsin Department of Natural Resources
3911 Fish Hatchery Rd

Fitchburg, WI 53711
(608) 273-5613
Scott.Inman@Wisconsin.gov

to the Non-Federal Sponsor City of Milwaukee:

David Misky
Department of City Development
809 N Broadway #2
Milwaukee, WI 53202
(414) 286-8682
dmisky@milwaukee.gov

to the Non-Federal Sponsor Milwaukee County Parks:

Sarah Toomsen
Manager of Planning and Development
Milwaukee County Parks
9480 Watertown Plank Road
Wauwatosa, WI 53226
(414) 257-7389
Sarah.toomsen@milwaukeecountywi.gov

to the Non-Federal Sponsor MMSD:

Tom Chapman, P.E.
Senior Project Manager
Milwaukee Metropolitan Sewerage District
260 W. Seeboth Street
Milwaukee, WI 53204-1446
(414) 225-2154
tchapman@mmsd.com

to the Non-Federal Sponsor We Energies:

Robert Paulson
Principal Environmental Consultant
WEC Energy Group – Business Services
333 Everett Street – A231
Milwaukee, WI 53203
(414) 221-3948
robert.paulson@we-energies.com

to GLNPO:

Heather Williams
Project Manager
Great Lakes National Program Office
77 West Jackson Blvd. (G-9J)
Chicago, IL 60604
(312) 886-5993
williams.heather@epa.gov

42. Any party may change its notice address provided in Paragraph 41 by written notice to the other party.

43. The addressee shall be deemed to have received any notice given pursuant to this Agreement at the earlier of the date it is actually received, or seven calendar days after it is mailed.

ARTICLE XVII - CONFIDENTIALITY

43. To the extent permitted by the laws governing each party, the parties agree to maintain the confidentiality of exchanged information when requested to do so by the providing party.

ARTICLE XVIII - RESPONSIBLE PARTIES

44. If it is discovered through any investigation for hazardous substances or other means that CERCLA liability, or liability under any other federal or state authority, for hazardous substances addressed by the Project can be attributed to a potentially responsible party, the Non-Federal Sponsors and GLNPO shall provide prompt written notice to each other. The Non-Federal Sponsors and GLNPO shall consult according to Article V in an effort to ensure that potentially responsible parties bear their fair share of clean up and response costs as defined in CERCLA or other federal or state law. Implementation of the Project shall not relieve any party from any liability that may arise under CERCLA or other federal or state law.

ARTICLE XIX - THIRD PARTY RIGHTS, BENEFITS, OR LIABILITIES

45. This Agreement does not create any rights, confer any benefits, or relieve any liability, for any third person not party to this Agreement.

ARTICLE XX - NON-LIABILITY OF OFFICERS AND EMPLOYEES

46. No officer, agent, consultant, or employee of the Non-Federal Sponsors or of GLNPO, may be charged personally, or held liable, under this Agreement because of any breach, attempted breach, or alleged breach of this Agreement.

47. This Agreement will become effective on the date the GLNPO representative signs this Agreement.

ARTICLE XXI - AUTHORITY OF SIGNATORY TO BIND AND AVAILABILITY OF FUNDS


48. Each undersigned representative of a Non-Federal Sponsor and GLNPO certifies that he or she is fully authorized to enter into the terms of this Agreement and to execute and legally bind such party to this Agreement.

49. Each undersigned representative of a Non-Federal Sponsor certifies that the Non-Federal Sponsor has the funds and financial capability to meet its required proportionate share of the Total Project Costs under this Agreement.

50. This Agreement may be executed in one or more counterparts and by facsimile, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

Project Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern

By:



Cathy Stepp
Great Lakes National Program Manager
U.S. Environmental Protection Agency

Date:

1-6-20

Project Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern


By: Beth Bui

pu
Preston Cole
DNR Secretary
Wisconsin Department of Natural Resources

Date: 11/21/19



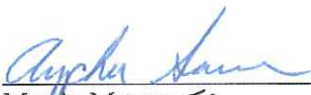
Project Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern

By: 
Tom Barrett
Mayor
City of Milwaukee

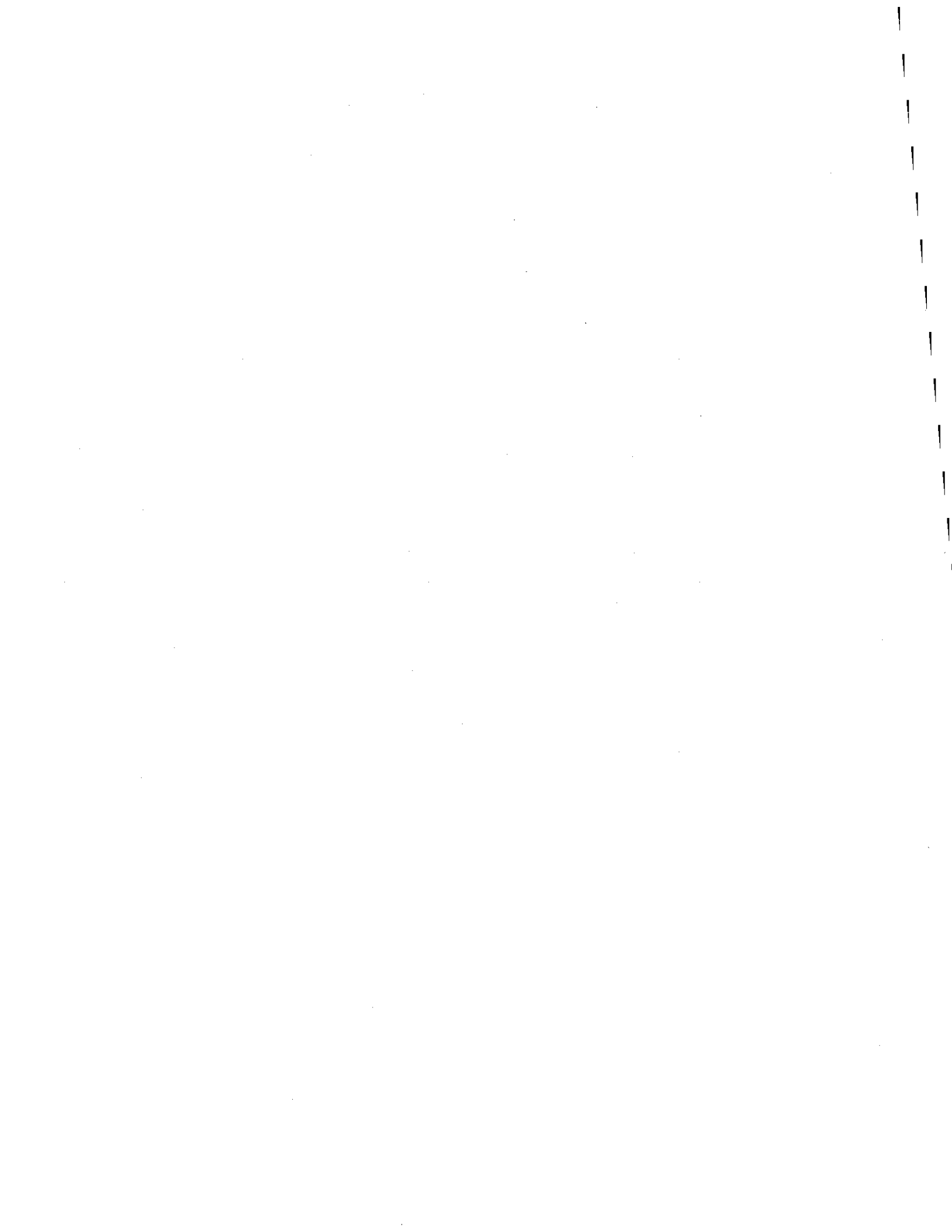
Date: 11-26-19

By: 
James Dwczarski
City Clerk
City of Milwaukee

Date: 11/26/19

By: 
Martin Matson ^{TO}
Comptroller
City of Milwaukee

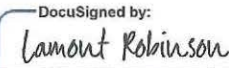
Date: 12/2/19



Project Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern

By:  Date: 11/15/2019
DocuSigned by:
Guy Smith
Name: 3C64EEF1D1CC409...
Executive Director
Milwaukee County Parks

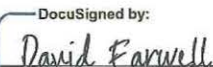
Approved with regards to County Ordinance Chapter 42:

By:  Date: 11/20/2019
DocuSigned by:
Lamont Robinson
Name: F5C978150D4D42D...
Community Business Development Partners

Reviewed by:


Approved for execution:

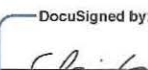
By:  Date: 11/22/2019
DocuSigned by:
Chris Luttrell
Name: 1D46DE464...
Risk Management

By:  Date: 11/25/2019
DocuSigned by:
David Farwell
Name: BC89465...
Corporation Counsel

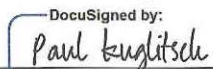
Approved as to funds available per Wis. Stat. sec. 59.255(2)(e):

Approved:

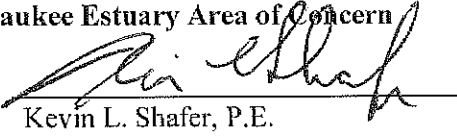
By:  Date: 11/25/2019
DocuSigned by:
Scott Manske
Name: 1D50848B...
Comptroller

By:  Date: 11/26/2019
DocuSigned by:
Chris Abele, County Executive
Name: 336E428...
County Executive

Approved as compliant under sec. 59.42(2)(b)5, Stats.:

By:  Date: 11/27/2019
DocuSigned by:
Paul Kuglitsch
Name: 18E1244D6...
Corporation Counsel

Project Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern

By: 

Kevin L. Shafer, P.E.
Executive Director
Milwaukee Metropolitan Sewerage District

Date: 11/8/19



Project Agreement for the Focused Feasibility Study, Pre-Design Investigation & Remedial Design of Impacted Sediments, the Remedial Design of the Proposed Dredge Material Management Facility, and the Removal of PCB Contaminant Source Material in the Milwaukee Estuary Area of Concern

By: Elizabeth Stueck-Mullane
Elizabeth Stueck-Mullane
Vice President Environmental
Wisconsin Gas LLC and
Wisconsin Electric Power Company dba
We Energies

Date: 11-8-19

**SCOPE OF WORK FOR
GREAT LAKES LEGACY ACT
FOCUSED FEASIBILITY STUDY, PRE-DESIGN INVESTIGATION
& REMEDIAL DESIGN OF IMPACTED SEDIMENTS,
THE REMEDIAL DESIGN OF THE PROPOSED DREDGE MATERIAL
MANAGEMENT FACILITY, AND
THE REMOVAL OF PCB CONTAMINANT SOURCE MATERIAL IN
THE MILWAUKEE ESTUARY AREA OF CONCERN
MILWAUKEE, WISCONSIN**

Background

The Milwaukee Estuary Area of Concern (AOC) includes portions of three watersheds along the Milwaukee River, Menomonee River, and Kinnickinnic River, as well as the inner and outer Milwaukee Harbor, former industrial canals and slips, and near-shore areas of Lake Michigan. The Milwaukee Estuary AOC has a long history of ecological degradation and pollution that continues into the present. Under the Great Lakes Water Quality Agreement, a Milwaukee Estuary Stage 1 Remedial Action Plan (RAP) was completed in 1991. Updates to the RAP have been periodically performed, with the most recent update in December 2016. The RAP identifies the project reaches targeted for this GLLA project within the AOC as requiring additional sediment characterization, followed by further evaluation for potential remedial action.

Historical discharges resulted in sediments within the AOC being contaminated with various pollutants, including metals, polychlorinated biphenyls (PCBs), and polycyclic aromatic hydrocarbons (PAHs). High levels of contamination have been found within the AOC, resulting in Superfund sites, including the Burnham Canal Superfund Alternative Site, Cedar Creek Superfund Alternative Site, Milwaukee Solvay Coke & Gas Superfund Alternative Site, and the Moss-American Superfund Site. The former We Energies West Side Manufactured Gas Plant (MGP) Site is located on the Menomonee River immediately downstream of 25th Street. The former We Energies Third Ward MGP site is located northeast of the Milwaukee River within the project reach.

To date remedial action has been performed in several areas of the AOC listed below:

- The Moss-American Superfund Site along the Little Menomonee River was remediated in the 1990s.
- The Kinnickinnic River Great Lakes Legacy Act (GLLA) Project was implemented by the Great Lakes National Program Office (GLNPO) and the Wisconsin Department of Natural Resources (DNR) in 2009 for the river stretch from Becher Street to Kinnickinnic Avenue.
- GLNPO and DNR previously completed remediation and habitat restoration of the Lincoln Park Phase I & II GLLA Projects on the Milwaukee River in 2012 and 2015, respectively.

- Mercury Marine previously completed remediation of the Cedar Creek Superfund Alternative Site at Ruck Pond, the former Hamilton Pond, and in Operable Unit 2A (the impounded areas), upstream of the Milwaukee River in the AOC.

In addition to remedial action, progress has been made on contaminated sediment investigations, feasibility studies, and design in the AOC listed below:

- GLNPO and We Energies completed a Remedial Investigation and Focused Feasibility Study of the Menomonee River & Milwaukee River (downstream of the confluence) in 2019.
- Design is in progress for the Burnham Canal Alternative Superfund remedial action by the Responsible Party (RP) as well as the Burnham Canal Wetland Ecosystem Restoration project designed by the United States Army Corps of Engineers (USACE).
- Design is underway for the Grand Trunk Wetland Restoration and fire slip habitat improvements.
- The Feasibility Study of Cedar Creek OU-2B is in progress by the RP.

Sediment site characterization has been performed in the AOC by GLNPO, DNR, USACE and others. Site characterization was performed by GLNPO under the Great Lakes Legacy Act for the Kinnickinnic River Mooring Basin in 2015, for the Menomonee River in 2015-2016, and for the Milwaukee River downstream of Estabrook Park, including floodplain areas, to the confluence with the Menomonee River in 2016-2019. Prior to the 2015-2016 site characterization, other sediment sampling events were performed on the Menomonee River by We Energies and USACE. We Energies and others performed a Remedial Investigation of the Milwaukee Solvay Coke & Gas Superfund Alternative Site along the Kinnickinnic River.

Further sediment characterization is planned for the remaining areas requiring sampling, generally to include the South Menomonee Canal, portions of the Kinnickinnic River and inner harbor, adjoining slips and canals along the Kinnickinnic, the outer harbor and areas adjacent to St. Francis within the near-shore area of Lake Michigan.

The following BUIs exist in the Milwaukee Estuary AOC: restrictions on fish and wildlife consumption; degradation of fish and wildlife populations; beach closings; fish tumors or other deformities; degradation of aesthetics; bird or animal deformities or reproduction problems; degradation of benthos; restriction on dredging activities; eutrophication of undesirable algae; bird/animal deformities or other reproduction problems; and loss of fish and wildlife habitat. Seven of the eleven BUIs are impacted by contaminated sediment in the AOC.

Constituents in the sediment are a primary pollution concern. Impacted sediments are ingested by bottom-dwelling benthic organisms as they feed and can be toxic to many of the invertebrates inhabiting the sediment. In addition, piscivorous fish, birds and mammals may be exposed to bioaccumulative chemicals, such as mercury and PCBs, via diet. Impacted sediments also have the potential to be resuspended by storms and floods.

Depending on the nature and extent of impacts in the project areas, remediation of sediments may be necessary to mitigate environmental risks. Thus, the work described in this Scope of Work is expected to support the eventual delisting of BUIs impacted by sediment contamination.

The Non-Federal Sponsors submitted *Proposal to US EPA GLNPO Legacy Act Program for Feasibility Study, Pre-design Investigation, and Remedial Design for Remediation of the Milwaukee Estuary* on June 6, 2019. On June 14, 2019, the Non-Federal Sponsors presented the application to GLNPO's technical review committee-lite. On July 10, 2019, the Non-Federal Sponsors provided a more detailed funding spreadsheet for the application.

Purpose

The purpose of this project is to complete a focused feasibility study (FFS), a pre-design investigation (PDI), and remedial design (RD) to address contaminated sediments in project areas identified as containing contaminated sediment, design of the proposed Milwaukee Estuary dredge material management facility (DMMF), and the removal of PCB contaminant source material within the Milwaukee Estuary Area of Concern, in Milwaukee, Wisconsin (See Figure 1). The project shall include completion of an FFS, PDI and RD, to be performed in various phases and within multiple project areas in the AOC as detailed below and as identified in Figure 1. The project includes various in-kind contributions by the Non-Federal Sponsors toward the investigation of sediment, remedial designs addressing contaminated sediments in the project areas, and the removal of material as a source control project within the AOC.

The FFS, PDI and RD work to be performed in multiple phases along with the various in-kind contribution activities will be accomplished through a partnership between DNR, the City of Milwaukee, Milwaukee County, Milwaukee Metropolitan Sewerage District (MMSD), We Energies and the U.S. Environmental Protection Agency (US EPA), represented by GLNPO, and their contractors and representatives.

Project Areas

The project areas include the Milwaukee River from Estabrook Park to the confluence with the Menomonee River, the Menomonee River downstream of 25th Street, the South Menomonee Canal, the Kinnickinnic River within the Area of Concern boundary and the Inner Harbor areas including adjacent slips and the mooring basin, the outer harbor and near-shore areas of Lake Michigan within the Area of Concern boundary, including the areas adjacent to St. Francis, Wisconsin. The project areas are further described in Figure 1.

Project Objectives

GLNPO and the project partners plan to conduct an FFS, PDI and RD with the following objectives for the various phases within the project areas. It is anticipated that the FFS, PDI and RD work will be completed by GLNPO and EPA's contractors.

- The objective of the FFS will be to evaluate remedial alternatives and support selection of a remedy that is protective of human health and the aquatic environment and will move the project areas toward remediation, contributing to the eventual removal of beneficial use impairments (BUIs) and delisting of the Milwaukee Estuary Area of Concern (AOC). The FFS may include sediment sampling, if needed for the FFS, as well as assessing shoreline and bulkhead stability within project areas specifically targeted for a remedial action. The FFS will assess how each alternative is likely to influence the BUIs, as well as short-term and long-term effects of each alternative on human health and the environment. The most effective remedy for each project area that is protective of human health and the aquatic environment will be selected.
- The PDI will include collection of additional targeted data gap sampling and investigation activities as deemed necessary for completion of the RD as determined during the FFS.
- The RD will include the preparation of plans, drawings and technical specifications for the implementation of the preferred remedial alternative selected in the FFS. The RD will include permitting, site restoration plans, habitat restoration plans, if applicable, and a cost analysis of the project.
- In addition to FS, PDI and RD activities to be performed by EPA's contractors, GLNPO will coordinate with and fund USACE to perform technical support as needed on the project.
- The project team will engage local stakeholders throughout development of the FFS, PDI and RD for each of the project reaches.

The Non-Federal Sponsors shall perform various in-kind contribution activities which have been determined by GLNPO to contribute to sediment assessment, remediation or the removal of material for source control within the project areas:

- The project includes addressing PCB source material situated in the Basin H sewer line along the Milwaukee River. The removal of the material in the Basin H sewer will be performed by MMSD as a source control project to prevent further or renewed contamination of sediment in the Milwaukee River. PCB contaminated material will be removed from the sewer and properly disposed.
- The City of Milwaukee shall perform a review and evaluation of as-built drawings and plans for sheet pile and potentially other shoreline structures along portions of

the project areas, as available, to aid in the design of remedial alternatives in regard to the structural stability of the shoreline. The review will include evaluation of embedment depth, tie-backs, wall type, age, structural integrity among other evaluations.

- The City of Milwaukee shall assist in the location of utilities in the project areas to aid in the design of remedial alternatives. Physically locating utilities, including the elevation of utility lines, will contribute to the development of a remedial design dredge prism which will be protective of utilities.
- The City of Milwaukee shall perform an assessment of the sewer in the Grand Trunk project area suspected to be a source of PCBs to the Kinnickinnic River. Based on sampling results, the City may perform a clean out of the sewer line as a source control project to prevent further or renewed contamination of sediment.
- We Energies shall perform the remedial design of the Solvay Car Ferry sediment remediation and associated habitat restoration along the Kinnickinnic River within Area 4 of the project area on Figure 1.
- Two areas of NAPL in Area 3 on Figure 1 referred to as NAPL-A and NAPL-B (Operable Unit 2), were previously identified during the GLLA RI and FFS of the Menomonee and Milwaukee Rivers performed by GLNPO and We Energies. We Energies shall perform the remedial design of the NAPL-A and NAPL-B sediment remediation located in Operable Unit 2 of the Milwaukee River within the project area.
- We Energies, with support from a WISDOT Harbor Assistance Program (HAP) Grant, will prepare a design for the proposed Milwaukee Estuary Dredge Material Management Facility (MKE-DMMF) in Area 5 on Figure 1. The proposed MKE-DMMF is intended to be the disposal location for non-TSCA contaminated sediment from the Milwaukee Estuary AOC.
- We Energies, as the Non-Federal Sponsor on the GLLA Menomonee and Milwaukee Rivers RI and FFS Project Agreement, provided in-kind contributions in excess of what was required of them under the Project Agreement. It should be noted that final review of the documentation supporting the contribution is in progress and that final approval of in-kind service documentation has not been issued. We Energies shall contribute overmatch from the Menomonee and Milwaukee Rivers RI and FFS Project Agreement towards this Milwaukee AOC FFS, PDI and RD. This overmatch includes We Energies' evaluation of the existing CDF Beneficial Use Investigation performed as part of the Menomonee and Milwaukee Rivers RI and FFS.
- Milwaukee County will provide access, as necessary and appropriate, to the Milwaukee River through its 878 acres of continuous greenspace along Reaches 1, 2, and 3, Area 1 on Figure 1.

Funding

DNR, the City of Milwaukee, Milwaukee County, MMSD and We Energies are the Non-Federal Sponsors for this Great Lakes Legacy Act project and will provide the 35% non-federal cost share. EPA will fund the 65% federal cost share for the project.

The estimated costs of the various proposed in-kind contribution activities to be performed by the Non-Federal Sponsors are provided below:

Activity	Estimated Cost	NFS
Basin H PCB Sewer Clean Out	\$6,200,000	MMSD
As-Built Evaluation	\$100,000	City of Milwaukee
Utility Locate	\$100,000	City of Milwaukee
Grand Truck Sewer Assessment	\$100,000	City of Milwaukee
Grand Trunk Sewer Clean Out	\$100,000	City of Milwaukee
Solvay Car Ferry Design	\$375,000	We Energies
NAPL Remedial Design	\$1,200,000	We Energies
DMMF Design (with WISDOT HAP)	\$1,200,000	We Energies
Menomonee & Milwaukee FFS Overmatch	\$350,000	We Energies

Total Estimated In-Kind Contributions: \$9,725,000

In addition to in-kind contribution activities, DNR will contribute \$525,000 in cash to the project, of which \$25,000 is an overmatch from the GLLA Lincoln Park Remedial Action Phase II Project Agreement, for a total of \$10,250,000 in in-kind contributions from the Non-Federal Sponsors.

The FFS, PDI and RD for the various project reaches that will be performed by GLNPO's and EPA's contractors are estimated at between \$13,000,000 and \$16,000,000. The total estimated cost of the Project Agreement is \$29,285,715.

Milwaukee Estuary AOC Project Phases & Project Milestones

A varying degree of sediment characterization has been performed in the remaining project areas.. Project areas requiring initial site characterization are not part of this Project Agreement and will be sampled outside of the scope of this GLLA project. Once the site characterization of a project area has been completed, GLNPO will begin an FFS for that reach as part of this Agreement, followed by a PDI, as necessary and applicable.

- Following GLLA Project Agreement signatures, an FFS will be initiated by GLNPO on the Milwaukee River sediment and floodplain areas from the

Estabrook Park to the confluence with the Menomonee River (Figure 1, Areas 1 and 2).

- It is anticipated that following site characterization of the South Menomonee Canal (outside of the Scope of this Project Agreement), GLNPO will complete an addendum or amendment to the completed Menomonee & Milwaukee (M&M) Rivers FFS to incorporate the South Menomonee Canal reach (Figure 1, Area 7) into the M&M FFS.
- Some areas of the Kinnickinnic River, inner harbor and adjoining slips and canals have been sampled previously, while some areas require initial sampling. The project team will review existing site data and will initiate an FFS of the Kinnickinnic River and adjoining areas as it is determined reasonable and appropriate. Additional site characterization, to be completed outside of the Scope of this Project Agreement, is planned for the Kinnickinnic River and adjoining areas, which will be incorporated into the Kinnickinnic FFS (Figure 1, Areas 3 and 4).
- Following further site characterization of remaining sediment areas in the outer harbor and in the near shore lake areas (Figure 1, Areas 5 and 6), GLNPO will complete an FFS of individual areas or collective areas as determined by GLNPO and the Non-Federal Sponsors.

Following completion of the FFS and any required PDI activities for the various reaches, RD will be performed by GLNPO. Project areas may be consolidated or reconfigured for the RD as appropriate and applicable based on location, the nature of the sediment remedial action required and the physical conditions of the reach, and disposal considerations.

The Non-Federal Sponsors will initiate the proposed in-kind contribution activities following PA signature. MMSD is planning to perform the Basin H sewer cleanout in 2020 and 2021. We Energies will complete the design of the NAPL removal and design of the Solvay Car Ferry Slip remediation and restoration, as well as continue the design of the proposed MKE-DMMF. The City of Milwaukee will initiate its review of the as-built drawings and plans as appropriate for the various project area during the FFS or PDI project phase. The City will initiate its assessment of the Grand Trunk sewer sediment, followed by clean out of the sewer if required and appropriate based on assessment results.

Figure 1:
Milwaukee Estuary GLLA PA SOW
FS, PDI & RD Project Areas

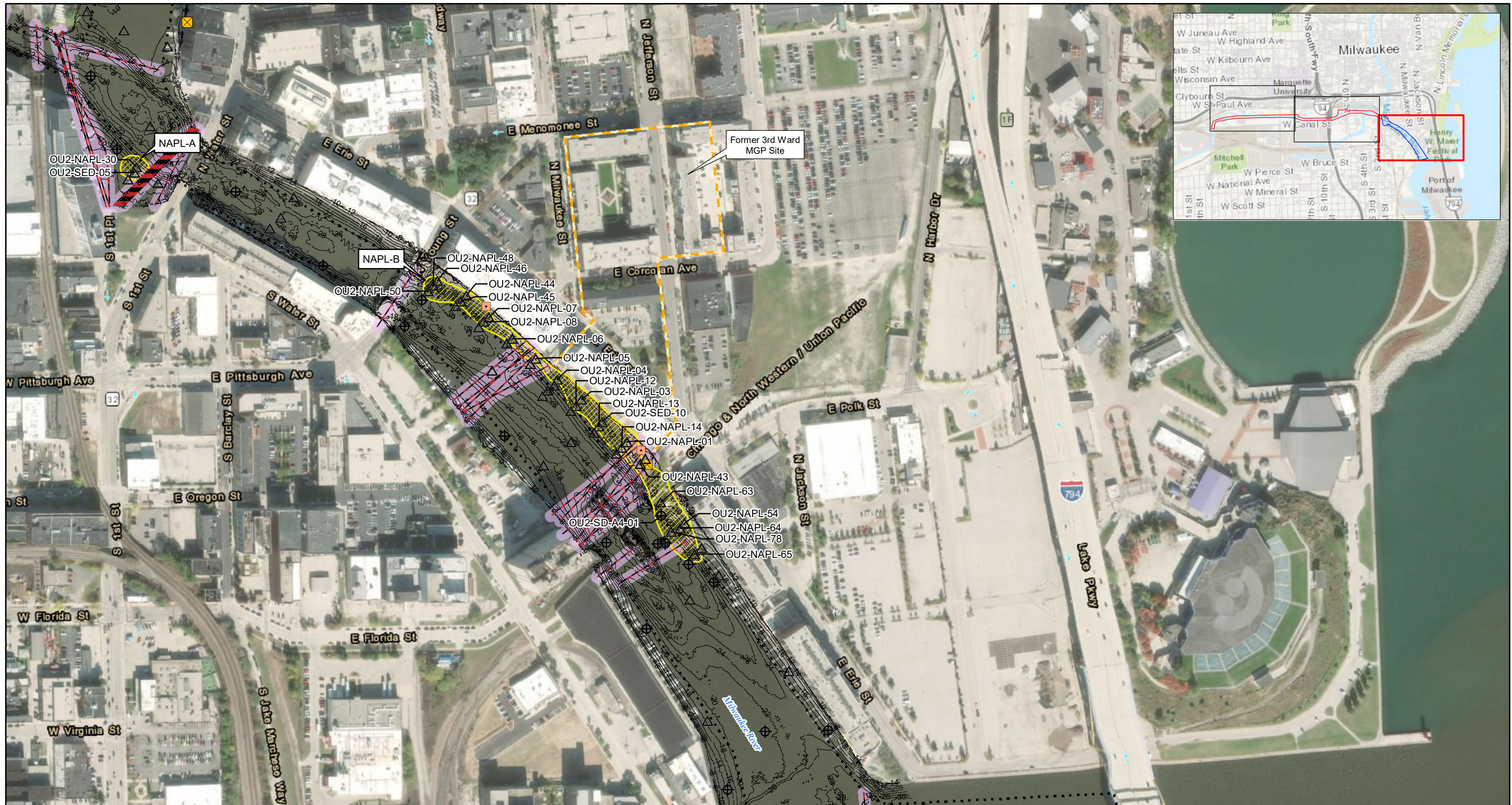
1. Milwaukee River & Floodplain Areas
(Estabrook Park to Former North Avenue Dam)
2. Milwaukee River Downtown Reach
(Former North Avenue Dam to Menomonee River Confluence)
3. Menomonee River
(Downstream of 25th Street)
4. Kinnickinnic River / Inner Harbor
(Kinnickinnic River within AOC Boundary to I-794 bridge, including slips and mooring basin)
5. Outer Harbor
6. Lake Michigan - St. Francis Area
7. South Menomonee Canal



Exhibit B

M&M FFS Figure 9c

OU2 and NAPL Deposits A & B



LEGEND

- ⊕ 2017 EPA GLNPO Sample Location
- △ 2017 WEC Sample Location
- 2015 EPA GLNPO Sample Location
- 2014 NRT Sample Location
- ⊠ Combined Sewer Outfall
- ⊠ Storm Sewer Outfall
- ⊠ Industrial Outfall
- ⊕ USGS Staff Gauge
- Bathymetry Contour (feet)
- Underground Utility with 20' Setback
- ⋯ Navigation Channel
- ▨ Lateral Extent of Observed NAPL

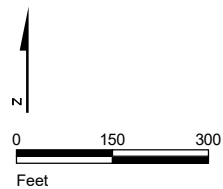


Figure 9c
Remediation Target Area Summary
 Menomonee and Milwaukee Rivers
 Focused Feasibility Study
 Milwaukee, Wisconsin

Exhibit C

EPA Action Plan III




Great Lakes
RESTORATION

GREAT LAKES RESTORATION INITIATIVE

ACTION PLAN III

Fiscal Year 2020 - Fiscal Year 2024



October 2019

Great Lakes RESTORATION



The Great Lakes Restoration Initiative (GLRI or the Initiative) was launched in 2010 as a non-regulatory program to accelerate efforts to protect and restore the largest system of fresh surface water in the world, and to provide additional resources to make progress toward the most critical long-term goals for this important ecosystem.

The GLRI has been a catalyst for unprecedented federal agency coordination, which has in turn produced unprecedented results. For example, under the Initiative's Action Plans I and II, GLRI accomplished the formal delisting of the Presque Isle Bay (PA), Deer Lake (MI), and White Lake (MI) Areas of Concern and moved a number of the remaining Areas of Concern closer to delisting through the removal of numerous environmental impairments. This activity reflects a major change from the 25 years before the Initiative, during which only one Area of Concern was delisted. GLRI resources have also been used for projects that have prevented more than one million pounds of phosphorus from entering the Great Lakes, reducing the excess phosphorus that contributes to harmful algal blooms in western Lake Erie, Saginaw Bay, and Green Bay. The GLRI produces economic benefits as well. A 2018 University of Michigan study* shows that every dollar of federal spending on GLRI projects between 2010 and 2016 will produce \$3.35 in additional economic activity in the Great Lakes region through 2036. Restoration projects undertaken by GLRI partners include not only enhancement and rehabilitation projects, but also projects that protect existing high-quality resources. In general, protecting existing resources is less costly than restoring degraded resources.

Under GLRI Action Plan III, the GLRI federal agencies that make up the GLRI Interagency Task Force and Regional Working Group (GLRI federal agencies – see back cover) will continue to use GLRI resources to strategically target the biggest threats to the Great Lakes ecosystem and associated human health issues. By adding GLRI resources to federal agency base budgets and using the combined resources to work with nonfederal partners to implement protection and restoration projects, GLRI federal agencies will continue to accelerate progress toward achieving long-term goals (see below). To guide this work during the next five years, GLRI federal agencies have developed GLRI Action Plan III. All proposed federal actions are subject to final Congressional appropriations.

GLRI Action Plan III outlines the next phase of work on Great Lakes environmental problems, many of which will take decades to resolve. GLRI Action Plan III lays out the necessary next steps to get us closer to the day when we will be able to achieve our long-term goals for the Great Lakes and our commitments under the Great Lakes Water Quality Agreement between the U.S. and Canada.



Through Fiscal Year (FY) 2018, the GLRI federal agencies have invested over \$2.4 billion from the GLRI for over 4,000 projects to improve water quality, protect and restore native habitat and species, prevent and control invasive species, and address other Great Lakes environmental problems.

The Great Lakes Restoration Initiative Accelerates Great Lakes Protection and Restoration in Five Focus Areas

FY 2010 – FY 2014: GLRI Action Plan I	FY 2015 – FY 2019: GLRI Action Plan II	FY 2020 – FY 2024: GLRI Action Plan III
Toxic Substances and Areas of Concern		
Invasive Species		
Nonpoint Source Pollution Impacts on Nearshore Health		
Habitats and Species		
Foundations for Future Restoration Actions		

Long-Term Goals for the Great Lakes Ecosystem

- All Areas of Concern delisted
- Fish safe to eat
- Water safe for recreation
- Safe source of drinking water
- No new self-sustaining invasive species
- Existing invasive species controlled
- Harmful/nuisance algal blooms eliminated
- Habitat protected and restored to sustain healthy ecosystem function and native species

*Socioeconomic Impacts of the Great Lakes Restoration Initiative. University of Michigan Research Seminar in Quantitative Economics. September 30, 2018.

GLRI ACTION PLAN III

GLRI Action Plan III is responsive to Clean Water Act Section 118 amendments in 2015 and 2016 that codified the GLRI. This codification includes a mandate to review and revise the Action Plan every five years and to address five priority areas. The first four of these priority areas correspond directly with the first four Focus Areas listed on the previous page. The fifth priority area is addressed within the fifth Focus Area – Foundations for Future Restoration Actions – and within the GLRI operating principles. The Focus Areas are not silos; GLRI agencies will continue to coordinate and collaborate across Focus Areas in recognition of the interrelated nature of many Great Lakes issues.

Under GLRI Action Plan III, GLRI federal agencies will continue to identify and implement the programs and projects that will best advance progress toward achieving long-term Great Lakes goals in partnership with states, tribes, and other nonfederal stakeholders. The GLRI federal agencies will also continue to work collaboratively with partners to effectively and efficiently move toward achieving those goals, maintaining the progress that has been made, and communicating results.

GLRI Action Plan III continues to specify objectives with related commitments and measures of progress for each Focus Area. Recognizing that it will take many years to document ecological and human health benefits for an ecosystem as large and complex as the Great Lakes, the measures of progress track progress toward achieving the GLRI's long-term goals, but focus on outputs and/or outcomes that can be measured over the five-year period covered by this Action Plan. Agencies will report annually on 23 measures of progress, identified on page 4, including 14 measures that have annual targets.

GLRI Action Plan III reflects the many ideas developed during the first 10 years of the GLRI that were contributed by the Great Lakes Advisory Board, the U.S. Environmental Protection Agency (EPA) Science Advisory Board, the Government Accountability Office, the Congressional Research Service, states, tribes, municipalities, and the general public. The GLRI federal agencies will continue to actively seek additional input from their many partners to protect and restore the Great Lakes.

The following principles will guide GLRI planning and implementation under Action Plan III.

Accountability and Reporting – The GLRI federal agencies will continue to track the progress and results of GLRI projects, including reporting on GLRI progress through the annual report required under Clean Water Act Section 118. Annual reports and other documents that describe GLRI reporting methodology can be found online at www.glri.us/documents. The agencies will also continue to report Great Lakes Water Quality Agreement activities through the triennial Progress Reports of the Parties, as well as the overall health of the Great Lakes ecosystem through the triennial State of the Great Lakes reports.

Communication and Outreach – The GLRI federal agencies will continue to update publicly available online information and will seek new ways to communicate about the program and status of ongoing work. The agencies will continue to communicate scientific findings broadly to help inform and prioritize future work.

Partnerships and Engagement – The GLRI federal agencies will continue to draw from clearly communicated priorities and actions identified in Lakewide Action and Management Plans and Biodiversity Conservation Strategies (see www.glri.us/documents) by Lake Partnerships and other Great Lakes Water Quality Agreement activities to influence annual planning. In selecting the best combination of programs and projects for the Great Lakes protection and restoration, GLRI federal agencies will continue to consult with the Great Lakes states and tribes and engage with other nonfederal stakeholders. GLRI federal agencies will also continue to emphasize public/private partnerships. Further, the GLRI federal agencies will continue to work with tribal governments in the spirit of self-determination and consistent with federal Indian trust responsibilities and to support tribal priorities that are consistent with GLRI goals and objectives.

Project Sustainability – The GLRI federal agencies will continue to encourage project plans and designs that are resilient to the effects of multiple stressors, including a changing climate, ecological change, invasive species, population pressures, and other variables. GLRI federal agencies will also encourage project stewardship to promote the sustainability and long-term benefits of projects.

Science-Based Adaptive Management – The GLRI federal agencies will continue to support and enhance the science-based adaptive management approach developed under Action Plan II. Within and across each Focus Area, the GLRI federal agencies will use a structured management approach for addressing environmental uncertainties by testing hypotheses, linking science to decision making, and adjusting project implementation, as necessary, to improve the probability of success. GLRI federal agencies will use this flexible approach to monitor project effectiveness and inform future restoration actions using the best available science and traditional ecological knowledge in decision making.

FY 2020 – FY 2024 Great Lakes Restoration Initiative Action Plan Summary

Focus Areas	Objectives	Commitments
Focus Area 1: Toxic Substances and Areas of Concern	<p>1.1. Remediate, restore, and delist Areas of Concern.</p> <p>1.2. Share information on the risks and benefits of consuming Great Lakes fish, wildlife, and harvested plant resources with the people who consume them.</p> <p>1.3. Increase knowledge about (1) “Chemicals of Mutual Concern” identified pursuant to the Great Lakes Water Quality Agreement’s Annex 3; and (2) other priority chemicals that have negatively impacted, or have the potential to negatively impact, the ecological or public health of the Great Lakes.</p>	<ul style="list-style-type: none"> • Implement management actions necessary to remove Beneficial Use Impairments and delist Areas of Concern. • Increase the availability and accessibility of information to vulnerable populations that consume Great Lakes fish, wildlife, and harvested plant resources. • Fill critical data gaps for Annex 3 and other priority chemicals in the Great Lakes through discrete monitoring and assessment activities.
Focus Area 2: Invasive Species	<p>2.1. Prevent introductions of new invasive species.</p> <p>2.2. Control established invasive species.</p> <p>2.3. Develop invasive species control technologies and refine management techniques.</p>	<ul style="list-style-type: none"> • Work with Great Lakes states and tribes to conduct rapid response actions or exercises. • Manage pathways through which invasive species can be introduced to the Great Lakes ecosystem. • Conduct early detection and surveillance activities. • Implement control projects for GLRI-targeted invasive species. • Conduct field testing of innovative control technologies and methods to prevent the introduction and to control the spread of invasive species. • Develop/enhance invasive species-specific collaboratives to support rapid responses and communicate the latest control and management techniques.
Focus Area 3: Nonpoint Source Pollution Impacts on Nearshore Health	<p>3.1. Reduce nutrient loads from agricultural watersheds.</p> <p>3.2. Reduce untreated stormwater runoff.</p> <p>3.3. Improve effectiveness of nonpoint source control and refine management efforts.</p>	<ul style="list-style-type: none"> • Implement systems of conservation practices on farms and in streams to reduce and treat nutrient runoff. • Increase adoption of enhanced nutrient management practices to reduce risk of nutrient losses from farmland. • Increase implementation of green infrastructure practices to infiltrate stormwater runoff. • Implement watershed management projects in urban and rural communities to reduce runoff and erosion. • Assess achievement of Great Lakes Water Quality Agreement’s Annex 4 nutrient targets. • Evaluate effectiveness of nonpoint source projects. • Develop new or improved approaches for reducing or preventing harmful algal blooms.
Focus Area 4: Habitats and Species	<p>4.1. Protect and restore communities of native aquatic and terrestrial species important to the Great Lakes.</p> <p>4.2. Increase resiliency of species through comprehensive approaches that complement on-the-ground habitat restoration and protection.</p>	<ul style="list-style-type: none"> • Identify habitats that support important Great Lakes species and take actions to restore, protect, enhance, and/or provide connectivity for these habitats. • Update and implement recovery actions for federal threatened, endangered, and candidate species. • Support population-level protections, enhancements, and re-introductions for state, tribal, and Great Lakes native species of importance.
Focus Area 5: Foundations for Future Restoration Actions	<p>5.1. Educate the next generation about the Great Lakes ecosystem.</p> <p>5.2. Conduct comprehensive science programs and projects.</p>	<ul style="list-style-type: none"> • Support experience-based learning opportunities for youth to promote Great Lakes stewardship. • Assess overall health of the Great Lakes ecosystem and identify the most significant remaining problems. • Identify cross-cutting science priorities and implement projects to address those priorities.

Measures of Progress – *These measures track results produced from GLRI funding unless otherwise noted.*

- 1.1.1.*# Areas of Concern where all management actions necessary for delisting have been implemented.
- 1.1.2.*# Beneficial Use Impairments removed in Areas of Concern.
- 1.1.3.* Areas of Concern with a complete and approved list of all management actions necessary for delisting.
- 1.2.1. Number of state and tribal organizations that collect and share information with vulnerable populations regarding the consumption of Great Lakes fish, wildlife, and harvested plant resources.
- 1.3.1. Discrete chemical monitoring and assessment activities conducted.
- 2.1.1.* Rapid responses or exercises conducted.
- 2.1.2. Projects that manage pathways through which invasive species can be introduced to the Great Lakes ecosystem.
- 2.1.3. Early detection and surveillance activities conducted.
- 2.2.1.* Aquatic/terrestrial acreage controlled.
- 2.3.1. Technologies and methods field tested.
- 2.3.2. Collaboratives developed/enhanced.
- 3.1.1.* Estimated pounds of phosphorus reductions from conservation practice implementation throughout Great Lake watersheds.
- 3.1.2.*# Acres receiving technical or financial assistance on nutrient management in priority watersheds.
- 3.2.1.* Estimated gallons (in millions) of untreated stormwater runoff captured or treated.
- 3.2.2.* Miles of Great Lakes shoreline and riparian corridors restored or protected.
- 3.3.1.* Nutrient monitoring and assessment activities conducted.
- 3.3.2.* Nutrient or stormwater runoff reduction practices or tools developed or evaluated.
- 4.1.1.* Acres of coastal wetland, nearshore, and other habitats restored, protected, or enhanced.
- 4.1.2.* Miles of connectivity established for aquatic species.
- 4.2.1.* Species benefited where actions have been completed to significantly protect or promote recovery of populations.
- 5.1.1. Youth impacted through education and stewardship projects.
- 5.2.1. Annual Great Lakes monitoring conducted and used to prioritize GLRI funding decisions.
- 5.2.2. Identify and address cross-Focus Area science priorities to support implementation of GLRI and the Great Lakes Water Quality Agreement.

* These measures have a numerical target.

#Measures 1.1.1, 1.1.2, and 3.1.2 track results from GLRI and other federal funding.

TOXIC SUBSTANCES AND AREAS OF CONCERN

Objective

1.1. Remediate, restore, and delist Areas of Concern.

Commitment

- Implement management actions necessary to remove Beneficial Use Impairments and delist Areas of Concern.

Since GLRI began, GLRI federal agencies and their state, tribal, local, and private partners have accelerated cleanup of Areas of Concern – areas designated as the most contaminated sites on the Great Lakes under the 1987 Great Lakes Water Quality Agreement. Cleanup of Areas of Concern has led to community revitalization, which is especially important in environmental justice communities and opportunity zones.

Cleanup of Areas of Concern is achieved through remediation and restoration work, which then leads to removing Beneficial Use Impairments. Areas of Concern are delisted when all the Beneficial Use Impairments have been removed. From the start of the GLRI through the end of FY 2018, GLRI federal agencies and their partners removed 70 Beneficial Use Impairments in 23 Areas of Concern – seven times the number removed in the 22 years preceding the establishment of the GLRI. Three Areas of Concern have also been delisted: Presque Isle Bay in Pennsylvania and Deer Lake and White Lake in Michigan. Additionally, GLRI federal agencies and their partners completed all the management actions required at eight more Areas of Concern:

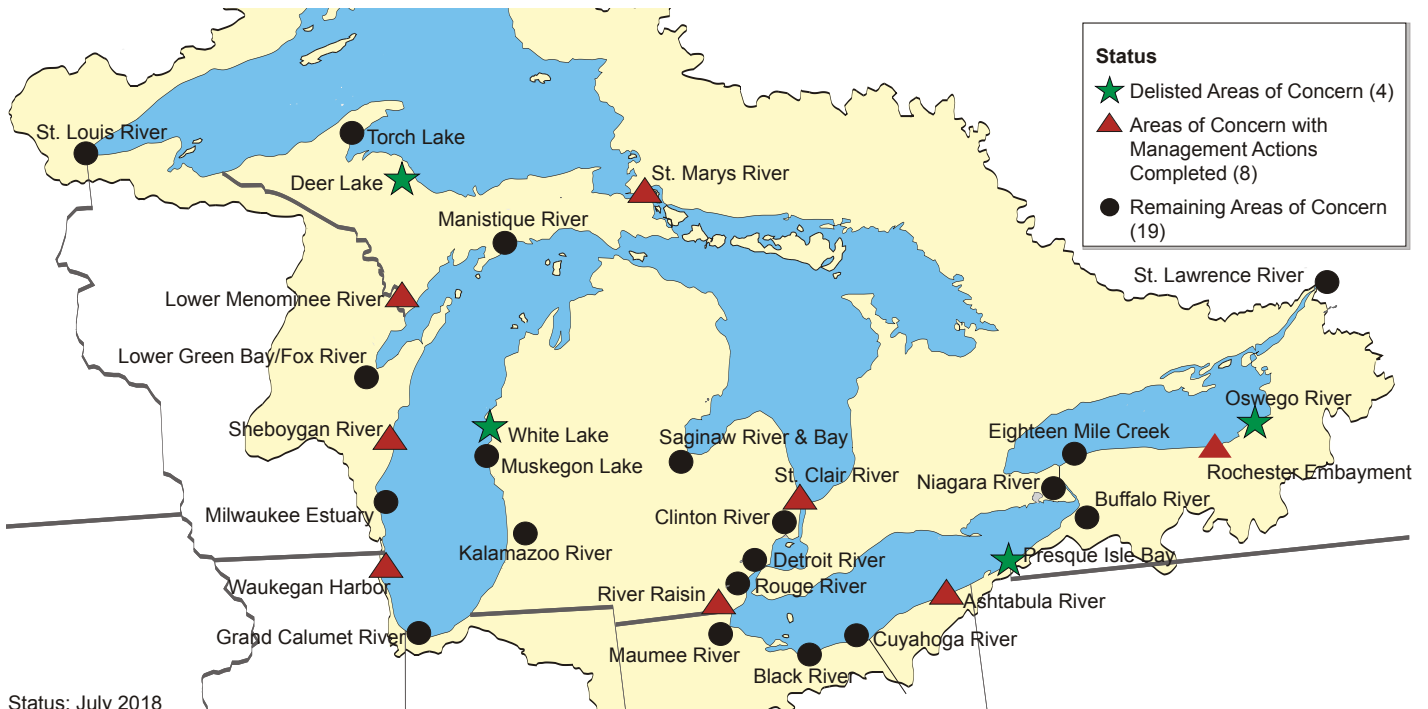
- River Raisin (MI)
- Lower Menominee (MI/WI)
- St. Clair River (MI)
- St. Marys River (MI)
- Sheboygan River (WI)
- Waukegan Harbor (IL)
- Ashtabula River (OH)
- Rochester Embayment (NY)

How do you restore an Area of Concern?

The process for removing Beneficial Use Impairments and delisting Areas of Concern starts with a scientific assessment by the state and GLRI federal agencies to determine the extent to which beneficial uses are impaired and the types of management actions required to remediate the Area of Concern. After management actions are implemented, a monitoring and verification plan may be implemented by the state agency, the local public advisory council, EPA, and others, if necessary, to determine whether the Beneficial Use Impairments removal criteria have been met. An Area of Concern is eligible to be delisted when all Beneficial Use Impairments have been removed.

Examples of Beneficial Use Impairments include, but are not limited to: restrictions on fish and wildlife consumption; degraded fish and wildlife populations; degradation of benthos; restrictions on dredging activities; loss of fish and wildlife habitat; bird or animal deformities or reproductive problems; fish tumors or other deformities; and beach closings.

U.S. Great Lakes Areas of Concern



Status: July 2018

FOCUS AREA 1

Measures of Progress with Annual Targets	Baseline/ Universe	FY 2020 Target	FY 2021 Target	FY 2022 Target	FY 2023 Target	FY 2024 Target
• 1.1.1. Areas of Concern where all management actions necessary for delisting have been implemented.	Baseline: 12 Universe: 31	16	18	19	20	22
• 1.1.2. Beneficial Use Impairments removed in Areas of Concern.	Baseline: 80 Universe: 255	93	101	109	118	128
• 1.1.3. Areas of Concern with a complete and approved list of all management actions necessary for delisting.	Baseline: 18 Universe: 31	22	24	26	28	31

"Baselines" identify results through FY 2018 and "Targets" are cumulative. "Universes" represent the total number possible.

Under GLRI Action Plan III, GLRI federal agencies and their state, tribal, local, and private partners will continue their remediation and restoration efforts and will continue to implement management actions in all remaining Areas of Concern. Management actions at the five remaining Areas of Concern that were originally targeted for management action completion under Action Plan II (covering FY 2015 - FY 2019) are expected to be completed by FY 2021: Buffalo River, Manistique River, Clinton River, Black River, and Muskegon Lake. Also, following input from states and tribes, the following 10 additional Areas of Concern have been identified where completion of management actions could conceivably be achieved in the next five years:

- Grand Calumet River (IN)
- Cuyahoga River (OH)
- Lower Green Bay/
Fox River (WI)
- St. Louis River (MN/WI)
- Maumee River (OH)
- St. Lawrence River (NY)
- Milwaukee Estuary (WI)
- Torch Lake (MI)
- Rouge River (MI)
- Eighteen Mile Creek (NY)

The Action Plan has set a target of actually completing all management actions at five of those 10 Areas of Concern. The five Areas of Concern where all management actions will be completed will depend on a number of factors, including the number and complexity of the management actions necessary to remove Beneficial Use Impairments.

Management actions are on-the-ground actions, including, but not limited to, remediating

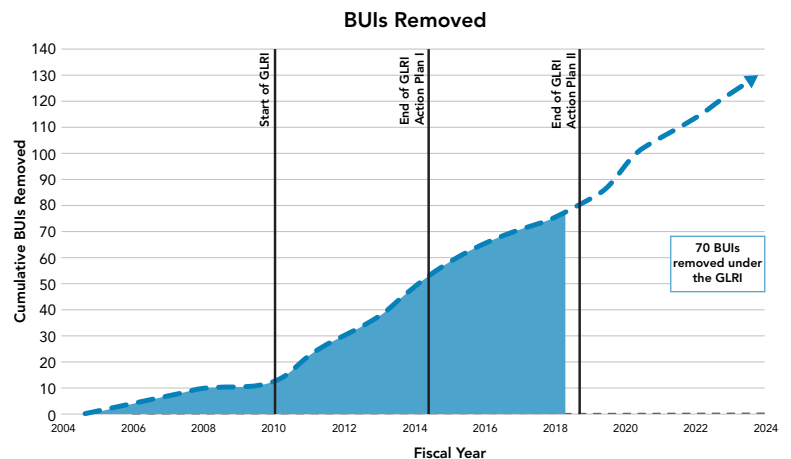
contaminated sediment through public/private partnerships and restoring habitat (e.g., improving fish passage, restoring wetlands, and removing dams), that will ultimately lead to the removal of Beneficial Use Impairments.

Under GLRI Action Plan III, GLRI federal agencies and their partners will also identify all of the management actions necessary for delisting at all of the Areas of Concern. Management action lists, compilations of remediation and restoration projects needed to remove Beneficial Use Impairments, constitute the "blueprints" for delisting Areas of Concern.

Under GLRI Action Plan III, GLRI federal agencies and their state, tribal, and local partners[♦] will hit the halfway point for removing Beneficial Use Impairments – a cumulative total of 128 out of 255 Beneficial Use Impairments are expected to be removed by the end of Action Plan III. While the delisting of Areas of Concern is not a specific measure of progress, delisting all Areas of Concern is the ultimate goal of the Area of Concern program.

[♦]Including local Area of Concern advisory groups.

Path to Delisting



TOXIC SUBSTANCES AND AREAS OF CONCERN

Objective

1.2. Share information on the risks and benefits of consuming Great Lakes fish, wildlife, and harvested plant resources with the people who consume them.

Commitment

- Increase the availability and accessibility of information to vulnerable populations that consume Great Lakes fish, wildlife, and harvested plant resources.

Measure of Progress

- 1.2.1. Number of state and tribal organizations that collect and share information with vulnerable populations regarding the consumption of Great Lakes fish, wildlife, and harvested plant resources.

Great Lakes Consortium for Fish Consumption Advisories



Fish advisory program managers from government health, water quality, and fisheries agencies collaborate through the Great Lakes Consortium for Fish Consumption Advisories (Consortium). Consortium members share fish contaminant data and assessment methods to promote consistency in fish consumption advice when communicating the risks and benefits of consuming fish to the public. Members use common educational messaging and coordinate outreach approaches for health education and community engagement. The Consortium seeks to communicate fish consumption advisories that will most effectively influence the behavior of fish consumers across the Great Lakes.

Since the GLRI began, GLRI federal agencies and their state and tribal partners have sought to increase the public's knowledge of the risks and benefits of fish consumption. They have also formed partnerships, such as the Consortium, to provide better fish consumption information in order to influence consumers to make healthier choices. The Consortium, along with individual federal, state, and tribal programs, has tested Great Lakes fish consumption messaging, designed new materials, evaluated effectiveness of the messaging, revised them as needed, and disseminated the improved state- and tribal-issued fish consumption guidelines.

Under GLRI Action Plan III, GLRI federal agencies and their state and tribal partners will continue to help the public make informed decisions about healthy

options for safe fish consumption, including expanding successful programs into other areas of the basin. This expansion will increase the availability and accessibility of safe fish consumption guidelines, as established by states and tribes, to vulnerable populations that consume Great Lakes fish. Agencies and their partners will also include more emphasis on the safe consumption of other wildlife and harvested plant resources. GLRI federal agencies and their partners will address the needs of vulnerable populations, particularly in environmental justice communities, and will provide the opportunity for the states and tribes to develop more innovative and effective outreach practices. Activities may include collection of information for use in programs to inform vulnerable populations and may incorporate traditional ecological knowledge.



FOCUS AREA 1

Objective

1.3. Increase knowledge about (1) "Chemicals of Mutual Concern" identified pursuant to the Great Lakes Water Quality Agreement's Annex 3; and (2) other priority chemicals that have negatively impacted, or have the potential to negatively impact, the ecological or public health of the Great Lakes.

Commitment

- Fill critical data gaps for Annex 3 and other priority chemicals in the Great Lakes through discrete monitoring and assessment activities.

Measure of Progress

- 1.3.1. Discrete chemical monitoring and assessment activities conducted.

Since GLRI began, GLRI federal agencies and their partners have characterized and assessed risks that emerging contaminants may pose to Great Lakes fish and wildlife, including completion of an evaluation of those contaminants with the greatest potential to adversely impact Great Lakes fish and wildlife. Through these characterizations and assessments, GLRI federal agencies and their partners were able to gain a better understanding of the presence and distribution of emerging contaminants, potential routes of exposure, and potential impacts on fish and wildlife.

GLRI federal agencies and their partners completed laboratory and field studies evaluating the biological effects of chemical mixtures and of long-term exposure of fish and other high-priority wildlife to contaminants.

Under GLRI Action Plan III,

GLRI federal agencies will coordinate with appropriate state and tribal partners to fill critical monitoring and data gaps for priority chemicals in the Great Lakes. Conducting discrete monitoring projects will increase knowledge of Great Lakes Water Quality Agreement's Annex 3 Chemicals of Mutual Concern and other priority chemicals that have negatively impacted, or have the potential to negatively impact, the health of the Great Lakes. Monitoring data generated through this process will provide information on the magnitude and extent of these chemicals in the Great Lakes. For example, Great Lakes monitoring data may be collected to support EPA's Per- and Polyfluoroalkyl Substances Action Plan.

Annex 3 of the Great Lakes Water Quality Agreement calls for protection of human health and the environment through cooperative and coordinated measures to reduce the release of Chemicals of Mutual Concern from human activities into the Waters of the Great Lakes. The eight chemicals binationally designated as Chemicals of Mutual Concern currently include:

- Hexabromocyclododecane (HBCD)
- Long-Chain Perfluorinated carboxylic acids (LC-PFCAs)
- Mercury
- Perfluorooctanoic Acid (PFOA)
- Perfluorooctane Sulfonate (PFOS)
- Polybrominated Diphenyl Ethers (PBDEs)
- Polychlorinated Biphenyls (PCBs)
- Short-Chain Chlorinated Paraffins (SCCPs)

Process to Identify Chemicals of Mutual Concern Under Annex 3 of the Great Lakes Water Quality Agreement

Identify and target Chemicals of Mutual Concern and other priority chemicals for discrete science and assessment activities

Implement discrete science and assessment activities

Evaluate and report project results

FOCUS AREA 2

INVASIVE SPECIES

Objective

2.1. Prevent introductions of new invasive species.

Commitments

- Work with Great Lakes states and tribes to conduct rapid response actions or exercises.
- Manage pathways through which invasive species can be introduced to the Great Lakes ecosystem.
- Conduct early detection and surveillance activities.

Since GLRI began, GLRI federal agencies and their partners have continued diligent efforts to prevent new introductions of invasive species in the Great Lakes ecosystem and to control existing invasive species populations. GLRI federal agencies and their partners have conducted 49 early detection field surveillances from FY 2015 through FY 2018. GLRI federal agencies and their partners also completed a total of 65 exercises and responses from FY 2015 through FY 2018 in response to new invasive species occurrences or expansion of the current range of existing invasive species, more than doubling the target of eight rapid responses and exercises per year over this period.

GLRI federal agencies and their partners continued extensive efforts to prevent bighead and silver carp from becoming established in the

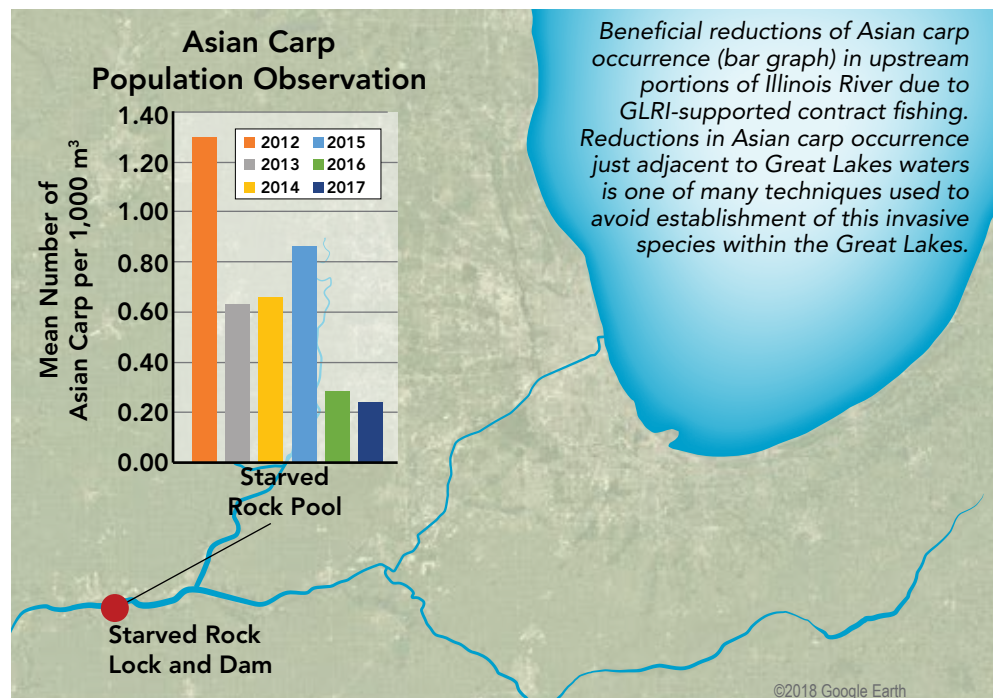
Great Lakes ecosystem. GLRI-funded actions during Action Plan II included installing and maintaining barriers to close Asian carp pathways to the Great Lakes, developing genetic testing tools, conducting contract fishing to remove over six million pounds of Asian carp from Upper Illinois Waterways near Lake Michigan, and assisting the Asian Carp Regional Coordinating Committee (ACRCC) to implement the Asian Carp Action Plan.

Surveillance programs continued to be a priority, forming the foundation for a multi-species early detection network. These surveillance activities were further refined and targeted by identifying 11 primary "injurious wildlife" species that have the potential to become invasive and highly detrimental to the Great Lakes. Other key GLRI-funded projects included the testing of new

technologies for managing ship ballast waters and establishing boat-washing stations in Michigan, Wisconsin, New York, and on tribal lands to reduce the potential for inadvertent spread of invasive species by recreational boats. Public education efforts have also helped boaters, anglers, and other resource users prevent the spread of invasive species.

How Can Invasive Species Get into the Great Lakes?

- Canals and waterways
- Recreational boating
- Commercial shipping
- Illegal trade of banned species
- Release of aquarium species
- Release of live bait
- Spread of plant species purchased through nurseries, internet sales, and water garden trade



FOCUS AREA 2

Measure of Progress with Annual Targets

- 2.1.1. Rapid responses or exercises conducted.

Baseline/
Universe

Baseline: 8
Universe: N/A

FY 2020
Target

8

FY 2021
Target

8

FY 2022
Target

8

FY 2023
Target

8

FY 2024
Target

8

Additional Measures of Progress

- 2.1.2. Projects that manage pathways through which invasive species can be introduced to the Great Lakes ecosystem.
- 2.1.3. Early detection and surveillance activities conducted.

“Baseline” identifies regularly expected annual exercises (1 per each of the 8 Great Lakes States). “Targets” for Measure 2.1.1 are not cumulative. “Universe” is not applicable.

Under GLRI Action Plan III,

GLRI federal agencies and their partners will continue to prevent new invasive species from establishing self-sustaining populations in the Great Lakes ecosystem. GLRI federal agencies and their partners will continue to increase the effectiveness of existing surveillance programs by increasing detection abilities through the use of new and emerging technologies (e.g., environmental DNA or eDNA). GLRI will continue to support risk assessments that identify future potential invaders and their likely pathways of invasion to strategically allocate resources and attention to stakeholders who play an important role in stopping new invaders from entering the Great Lakes. GLRI partners will be able to use risk assessments in combination with updated “least wanted” lists (such as <http://www.gsgp.org/media/2017/ais-least-wanted-announcement.pdf>) to focus prevention activities. Increasing the ability and frequency of Great Lakes states to quickly address new invasions or range expansion of existing invasive species will be a key GLRI strategy. Because the Great Lakes can be a freshwater invasion pathway to the 31 states within the Mississippi River watershed and beyond, these prevention efforts will also benefit the entire nation.



Locations sampled by the Great Lakes Early Detection and Surveillance Program are marked with a ●. This program is a collaboration between states and the U.S. Fish & Wildlife Service and is supported by the GLRI. Both traditional aquatic sampling methods and emerging technologies are deployed at these locations to detect non-native species and track the expansion of non-native species over time.

GLRI will continue to help protect the Great Lakes from Asian carp, principally through prevention, control, and response actions. For example, GLRI funding supports (i) construction projects to prevent Asian carp from entering the Great Lakes via Eagle Marsh (outside Fort Wayne, IN) and the Ohio-Erie Canal (Akron, OH); (ii) contract fishing (pictured below) to control Asian carp in the Illinois River; and (iii) coordinated state and federal rapid responses in Lake Erie to remove grass carp. With support from the GLRI, the ACRCC will continue to work to implement the Asian carp action plan to prevent the various species of Asian carp, including grass carp, black carp, silver carp, and bighead carp, from establishing self-sustaining populations in the Great Lakes.

Protecting the Great Lakes from Asian Carp



The ACRCC implements annual Asian Carp action plans that include surveillance, response actions, and testing of new control technologies. For example, the 2019 Asian Carp Action Plan includes aggressive new prevention and control efforts, including expanded Asian carp population

reduction along established fronts, large-scale field trials of potential barriers and deterrent technologies, and actions to address black and grass carp threats. More information about the ACRCC and the Asian Carp Action Plan is available at <http://www.asiancarp.us>.



Contract fishing and removal of Asian carp species in the Illinois River is an example of critical activity identified by the Asian Carp Action Plan and supported by GLRI.

FOCUS AREA 2

INVASIVE SPECIES

Objective

2.2. Control established invasive species.

Commitment

- Implement control projects for GLRI-targeted invasive species.

Controlling Invasive Species in the Great Lakes Basin



GLRI partners inspecting the effectiveness of terrestrial invasive species control along Lake Michigan sand dunes.

Since GLRI began, GLRI federal agencies and their partners have implemented projects to control invasive species, including, but not limited to: baby's breath, buckthorn, emerald ash borer, Eurasian watermilfoil, garlic mustard, *Hydrilla*, japanese knotweed, invasive strains of phragmites, purple loosestrife, and sea lamprey.

Since 2010, GLRI partners adapted to the discovery of new, non-native species and better mapping of the distribution of invasive species. The focus of GLRI invasive species control projects is expected to continue to adapt and change to highlight new species of emerging concern.

GLRI federal agencies and their partners responded to numerous

invasive problem areas, with notable efforts including controlling *Hydrilla* infestations in New York, as well as *Phragmites* and invasive mussels across the basin. These control projects were done with partners that will continue maintenance and stewardship beyond the duration of the federally funded projects. Most projects will require additional, low-level maintenance as sites progress toward full recovery.

FOCUS AREA 2

Measure of Progress with Annual Targets

- 2.2.1. Aquatic/terrestrial acreage controlled.

Baseline/
Universe

FY 2020
Target

FY 2021
Target

FY 2022
Target

FY 2023
Target

FY 2024
Target

Baseline: 153,569
Universe: N/A

165,000

171,000

177,000

183,000

189,000

"Baseline" identifies results through FY 2018 and "Targets" are cumulative. "Universe" is not applicable.

Under GLRI Action Plan III,

GLRI federal agencies and their partners will continue controlling aquatic, wetland, and terrestrial invasive species with an additional emphasis on maintaining the benefits of previously completed projects. Federal land management agencies (National Park Service, U.S. Fish & Wildlife Service, and U.S. Forest Service) will continue to implement control projects in national forests, parks, wildlife refuges, and other federal lands where they have direct implementation responsibility. These federal land management agencies will also continue to partner with states, tribes, and neighboring communities to promote larger-scale protection and restoration through control programs, such as Cooperative Weed Management Areas and Partnerships for Regional Invasive Species Management.

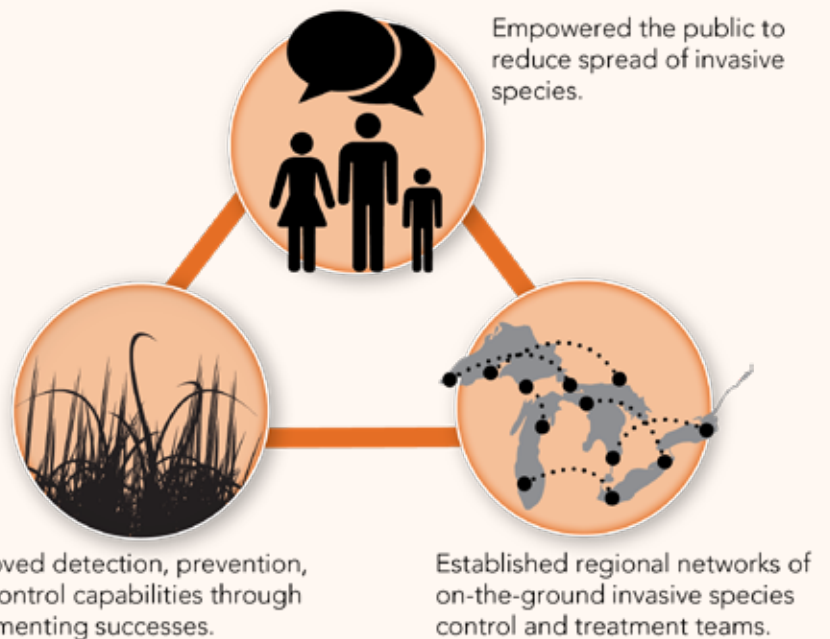
The Great Lakes Sea Lamprey Control Program will continue to identify strategic barriers to lamprey expansion and actively pursue actions to maintain their effectiveness while also advancing new control technologies. Sea lamprey control will be critical to ensuring that other GLRI accomplishments, such as the restoration of native open lake fish species, are not compromised in future years. Overall, invasive species control activities will continue to be strategically implemented to advance resiliency of GLRI projects.



Local communities have relied on GLRI support to increase capacity to address both aquatic invasive species, including Hydrilla in New York (left photo) and various terrestrial invasive plant species in northern Wisconsin (right photo).

Supporting Sustainable Invasive Species Control through Community Projects

The GLRI is actively building the capability of Great Lakes communities to manage invasive species through supporting on-the-ground and in-the-water control projects by increasing local capacity and motivating use of adaptive management principles.



FOCUS AREA 2

INVASIVE SPECIES

Objective

2.3. Develop invasive species control technologies and refine management techniques.

Commitments

- Conduct field testing of innovative control technologies and methods to prevent the introduction and to control the spread of invasive species.
- Develop/enhance invasive species-specific collaboratives to support rapid responses and communicate the latest control and management techniques.

Since GLRI began, GLRI federal agencies and their partners have worked to develop and enhance several invasive species control technologies. Researchers worked to develop techniques to detect, attract, and remove Asian carp. Sea lamprey pheromones were synthesized and field-tested to assess whether

pheromones can be used to improve the efficiency of trapping sea lamprey. New procedures were developed and refined for testing the efficacy of ballast water treatment systems in the Great Lakes. Two innovative technologies were developed and field-tested as new controls for *Phragmites*. New partnerships and stakeholder networks

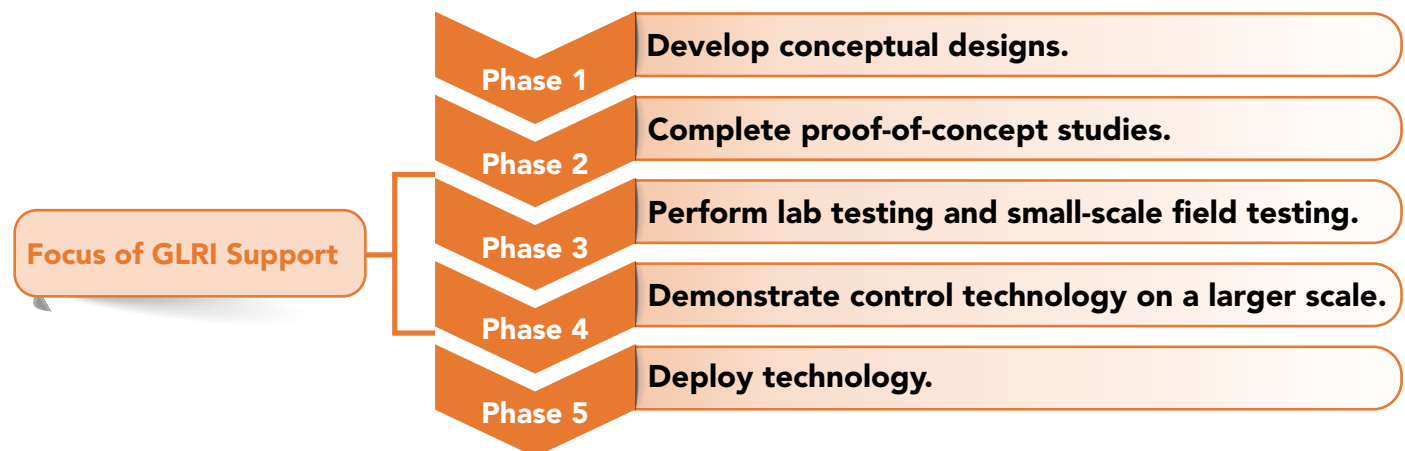
were established for monocious *Hydrilla*, grass carp, and invasive mussels. These partnerships, also known as collaboratives, support rapid responses and communicate the latest control and management techniques.

The Importance of Developing Invasive Species Control Technologies

A number of effective control technologies have been developed to control invasive species in the Great Lakes. One of the longest-running and most effective invasive control technology programs is the sea lamprey control program. Its success is largely due to a multi-year effort to test almost 6,000 chemical compounds to identify the compound that most effectively controls sea lampreys without harming other species. GLRI federal agencies and their partners are using GLRI support to further refine sea lamprey control techniques and to develop targeted control methods for other invasive species impacting the Great Lakes ecosystem.



Developing Invasive Species Control Technology for the Great Lakes Ecosystem



GLRI provides support for invasive species control technologies with proven potential that require additional testing. With that support, technologies have been deployed for *Hydrilla* and *Phragmites*. Additional technology testing and demonstration will continue to control these and other invasive species.

FOCUS AREA 2

Measures of Progress

- 2.3.1. Technologies and methods field tested.
- 2.3.2. Collaboratives developed/enhanced.

Under GLRI Action Plan III,

GLRI federal agencies and their partners will continue to develop and enhance technologies to control Great Lakes invasive species by moving the latest technologies for invasive species detection and control from the testing phase to implementation in the field. GLRI federal agencies will continue to enhance invasive species collaboratives to support rapid responses and to communicate the latest control and management

techniques. The *Hydrilla* collaborative will demonstrate how small patches of *Hydrilla* can be eliminated without the use of large-scale treatments. GLRI federal agencies will continue to further refine sea lamprey control techniques and will work to develop targeted control methods for other invasive species impacting the Great Lakes ecosystem.

The GLRI will continue to support the Great Lakes *Phragmites* Collaborative

to facilitate communication across the region and serve as the resource center for information on *Phragmites* biology, management, and scientific research. Members of the Great Lakes *Phragmites* Collaborative identified the need for data-driven best management practices and developed the *Phragmites* Adaptive Management Framework to learn from management activities basin wide and guide future management decisions.



GLRI is supporting experiments and data collection as ongoing invasive species projects are implemented so that the effectiveness of these projects across the Great Lakes is known. *Phragmites* control, including mowing (Treatment A), aerial spraying (Treatment B), backpack spraying (Treatment C), burning (Treatment D), and flooding (Treatment E), are examples of a variety of approaches that may have varying success depending on the setting of project. A learning-while-doing approach, or adaptive management, will be applied to *Phragmites* control and other invasive species control efforts to increase the success rate and resiliency of future investments.

NONPOINT SOURCE POLLUTION IMPACTS ON NEARSHORE HEALTH

Objective

3.1. Reduce nutrient loads from agricultural watersheds.

Commitments

- Implement systems of conservation practices on farms and in streams to reduce and treat nutrient runoff.
- Increase adoption of enhanced nutrient management practices to reduce risk of nutrient losses from farmland.

Reducing Nutrient Runoff – Accomplishments to Date under GLRI



More than one million pounds of phosphorus runoff reduced from farmlands.



More than 700,000 cropland acres under conservation in agricultural priority watersheds.

Since GLRI began, GLRI federal agencies and their partners have funded multiple activities to reduce nutrient runoff and prevent nearshore harmful and nuisance algal blooms.

Phosphorus runoff from agricultural lands is an important source of excess nutrients to Great Lakes nearshore areas. Because implementing measures to prevent erosion and runoff from farmlands is often voluntary, the bulk of

GLRI efforts to date has been to provide farmers with financial and technical resources to adopt conservation practices. Outreach and funding have been targeted to where they would have the greatest impact on improving water quality.

GLRI federal agencies have used GLRI support to promote better nutrient management and more than double the number of farmland acres enrolled in agricultural conservation programs

in four priority watersheds. These programs have helped producers reduce phosphorus in runoff, preventing more than one million pounds of phosphorus from washing off agricultural lands to date. Continued support for technical assistance and comprehensive conservation planning will be vital to sustaining and further reducing excess nutrient loads into the Great Lakes.

Agricultural Priority Watersheds.

GLRI federal agencies and partners are currently focusing phosphorus reduction efforts in four GLRI priority watersheds: the Lower Fox River, the Saginaw River, the Maumee River, and the Genesee River. These agriculture-dominated watersheds are the watersheds most in need of phosphorus reductions to prevent excess algae growth in the Great Lakes. GLRI federal agencies and partners will continue to work in these watersheds, and others that need a reduction of excess nutrients, as appropriate.



FOCUS AREA 3

Measures of Progress with Annual Targets	Baseline/Universe	FY 2020 Target	FY 2021 Target	FY 2022 Target	FY 2023 Target	FY 2024 Target
<ul style="list-style-type: none"> 3.1.1. Estimated pounds of phosphorus reductions from conservation practice implementation throughout Great Lake watersheds. 	Baseline: 1,113,603 Universe: N/A	1,600,000	1,900,000	2,200,000	2,500,000	2,800,000
<ul style="list-style-type: none"> 3.1.2. Acres receiving technical or financial assistance on nutrient management in priority watersheds. 	Baseline: 1,955,867 Universe: 10,000,000	2,200,000	2,370,000	2,515,000	2,685,000	2,817,500

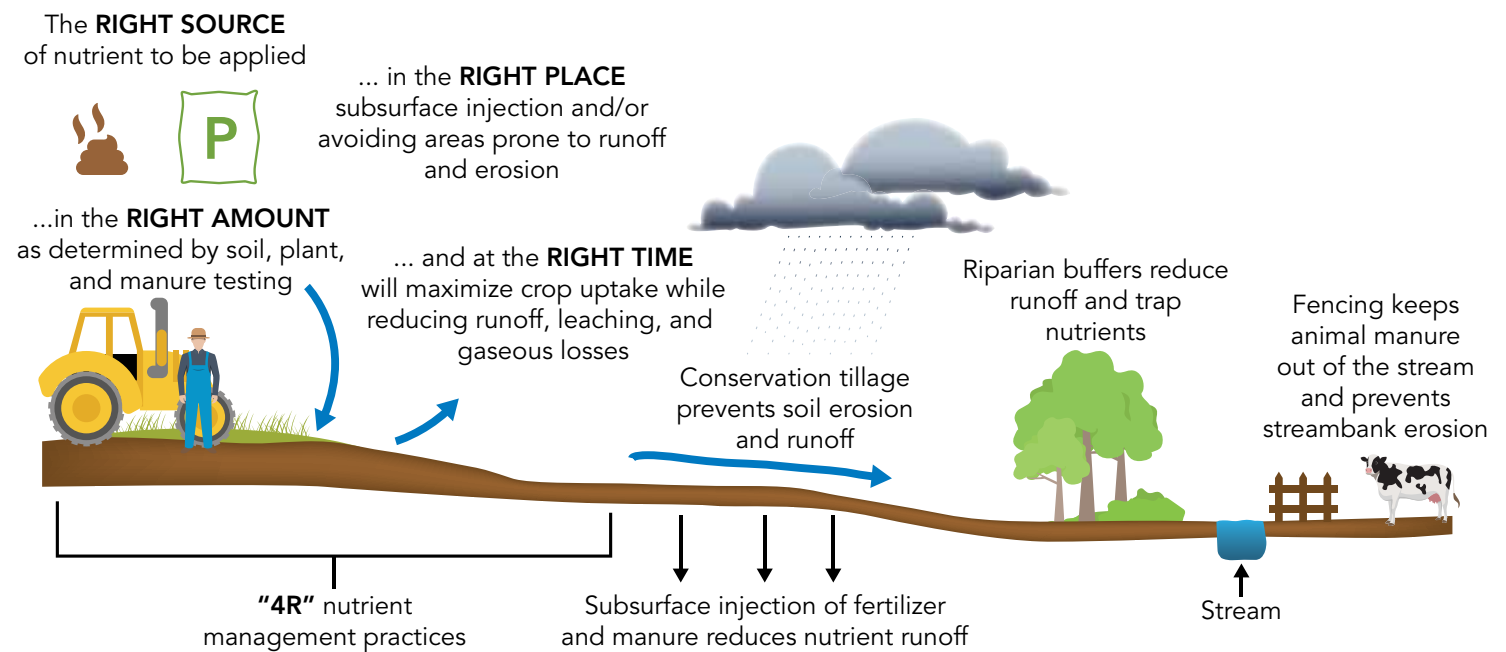
"Baseline" for Measure 3.1.1 identifies results through FY 2018. Baseline for Measure 3.1.2 identifies results through FY 2017. "Targets" are cumulative. "Universes," when applicable, represent the total number possible.

Under GLRI Action Plan III, GLRI federal agencies and their partners will continue working on farms and in streams to reduce excess nutrient loads from agricultural watersheds, emphasizing utilization of conservation systems and work in priority watersheds. GLRI federal agencies and their partners will do this by:

- Improving the effectiveness of existing voluntary, incentive and market-based, and regulatory programs;
- Encouraging producers and agribusinesses to adopt innovative technologies and performance-based approaches to reduce excess nutrient runoff and soil losses;
- Expanding outreach and demonstration farm networks to improve adoption of on-farm nutrient management practices;
- Promoting practices that slow down and filter agricultural stormwater runoff, such as two-stage ditches, wetlands, and saturated buffers; and
- Emphasizing actions that result in long-term and sustainable nutrient reductions.



Example conservation practices: no-till farming (top) and grassed waterway (bottom).



An example of an enhanced conservation practice system: nutrient management practices coupled with minimal tillage, continuous cover, and riparian buffers. A holistic management approach is necessary to achieve nutrient load reductions.

NONPOINT SOURCE POLLUTION IMPACTS ON NEARSHORE HEALTH

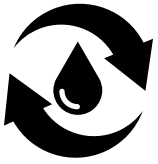
Objective

3.2. Reduce untreated stormwater runoff.

Commitments

- Accelerate implementation of green infrastructure practices to infiltrate stormwater runoff.
- Implement watershed management projects in urban and rural communities to reduce runoff and erosion.

Reducing Stormwater Runoff – Accomplishments to Date under GLRI



More than 250 million gallons of untreated urban stormwater runoff prevented from entering the Great Lakes.

100+

More than 100 local watershed projects implemented in Great Lakes communities.

Since GLRI began, GLRI federal agencies and their partners have reduced the loading of sediment, nutrients, toxic contaminants, and pathogens to Great Lakes tributaries and nearshore waters by implementing projects in Great Lakes communities. GLRI funding supported green infrastructure projects in Great Lakes shoreline cities to reduce untreated stormwater runoff and to improve nearshore water quality. These green infrastructure projects had the added benefit of increasing greenspace in urban areas and providing habitat for pollinators. Watershed management projects were also implemented to stabilize streambanks, increase forest cover, construct wetland meadows, and improve water quality at beaches.



Examples of green infrastructure above: rain garden (bottom left), constructed stormwater wetland (top right), planting trees in a riparian corridor (bottom right).

FOCUS AREA 3

Measures of Progress with Annual Targets

	Baseline/ Universe	FY 2020 Target	FY 2021 Target	FY 2022 Target	FY 2023 Target	FY 2024 Target
<ul style="list-style-type: none"> 3.2.1. Estimated gallons (in millions) of untreated stormwater runoff captured or treated. 	Baseline: 252 Universe: N/A	350	400	450	500	550
<ul style="list-style-type: none"> 3.2.2. Miles of Great Lakes shoreline and riparian corridors restored or protected. 	Baseline: 26 Universe: N/A	33	40	47	54	61

Measure 3.2.2 is applicable for restoration or protection from nonpoint source runoff, a subset of a similarly worded measure from the Habitat Focus Area under Action Plan II. "Baselines" identify results through FY 2018. "Targets" are cumulative. "Universes" are not applicable.

Under GLRI Action Plan III, GLRI federal agencies and their partners will continue to encourage and accelerate implementation of green infrastructure projects to reduce the impacts of polluted runoff on nearshore water quality. These projects will capture or slow the flow of untreated runoff and filter out sediment, nutrients, toxic contaminants, pathogens, and other pollutants from runoff before it enters Great Lakes tributaries, beaches, and nearshore waters.

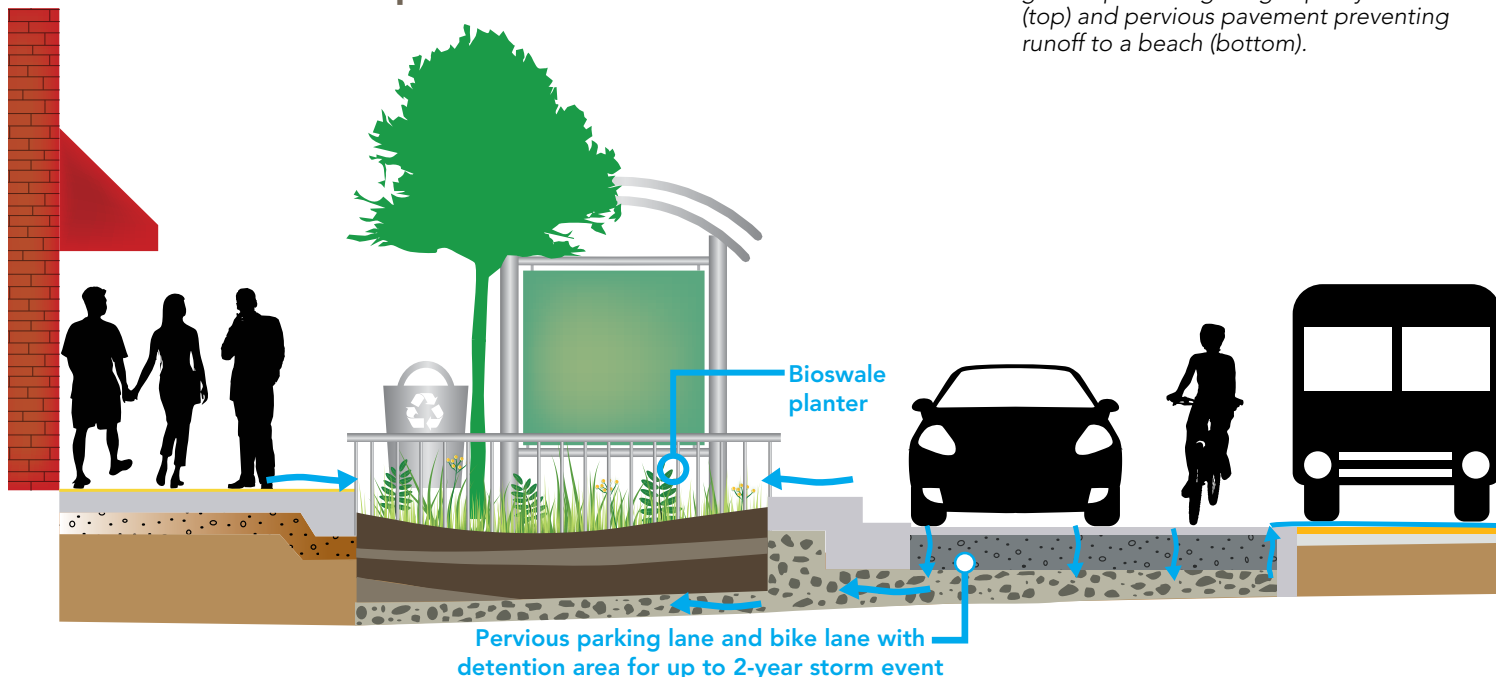
In addition to supporting green infrastructure, GLRI funding will continue to support watershed management projects that slow and intercept runoff. For example, streambank improvement projects identified in watershed plans can be effective in improving and protecting water quality. Actions such as re-establishing riparian vegetation and stabilizing streambanks can help increase a stream's resiliency to stressors such as large storms. Restoration projects along coastlines can incorporate resilient features to mitigate effects of more extreme storms, high wave action, interrupted sediment transport, and presence of manmade physical structures. Activities to reduce stormwater runoff and streambank erosion also complement these restoration efforts and increase coastal resiliency.

GLRI federal agencies will work with local partners to slow down and soak up stormwater runoff, and filter pollutants.



Examples of green infrastructure: rain garden protecting a high-quality woodland (top) and pervious pavement preventing runoff to a beach (bottom).

Green Infrastructure Captures and Filters Runoff



NONPOINT SOURCE POLLUTION IMPACTS ON NEARSHORE HEALTH

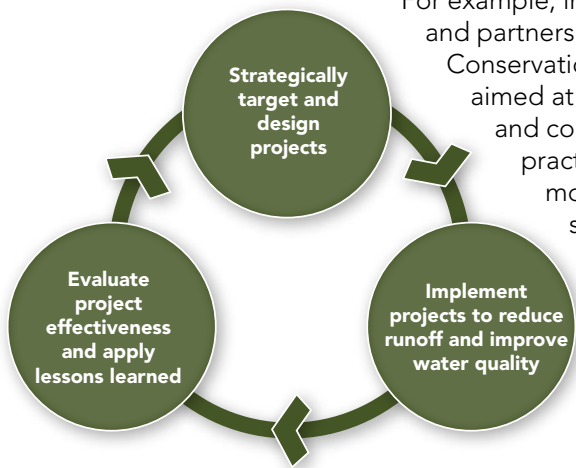
Objective

3.3. Improve effectiveness of nonpoint source control and refine management efforts.

Commitments

- Assess achievement of Great Lakes Water Quality Agreement's Annex 4 nutrient targets.
- Evaluate effectiveness of nonpoint source projects.
- Develop new or improved approaches for reducing or preventing harmful algal blooms.

Since GLRI began, GLRI federal agencies and partners have coordinated monitoring and assessments to improve the effectiveness of their nonpoint source control activities.



For example, in 2012, GLRI federal agencies and partners began working on a Conservation Effects Assessment Project aimed at evaluating various types and combinations of agricultural practices to determine which were most effective at removing soluble phosphorus that can drive algal blooms in Lake Erie. Participants in the Conservation Effects Assessment Project found that implementing systems of conservation practices (nutrient management, cover crops, and drainage management) in specific priority areas will have the greatest impact

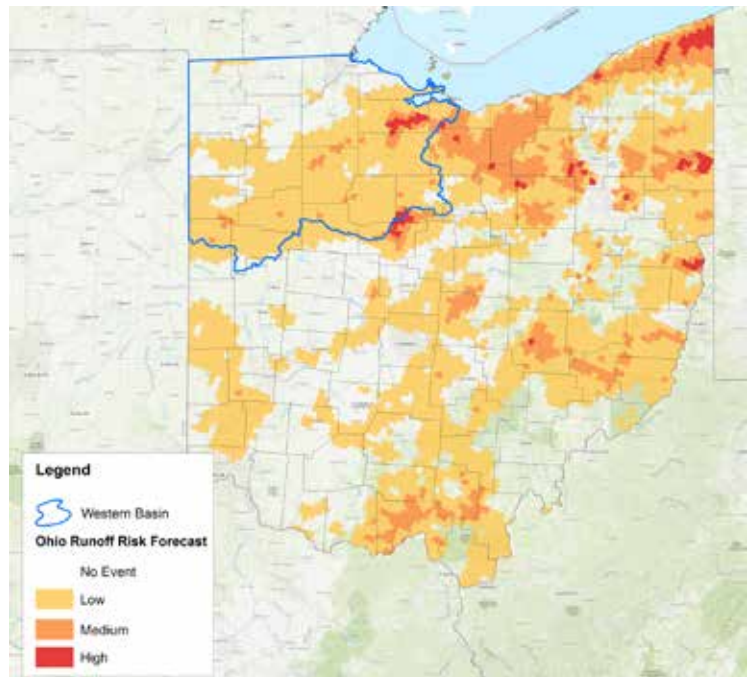
on reducing phosphorus loads to western Lake Erie. GLRI federal agencies applied that information to accelerate phosphorus reduction accomplishments by 20% over the goal that had been planned under Action Plan II. Over the next five years, GLRI federal agencies expect to reduce an additional 1,500,000 pounds of agricultural phosphorus runoff – a 40% increase over the goal under Action Plan II.

Similarly, in 2014, GLRI federal agencies and partners began evaluating performance of various green infrastructure practices in urban areas (such as: Gary, IN; Detroit, MI; and Buffalo, NY). GLRI federal agencies will apply the information learned from these studies to improve effectiveness of stormwater reduction projects funded under GLRI. Over the next five years, GLRI federal agencies expect to more than double the amount of stormwater runoff reduced through green infrastructure practices to 550 million gallons by the end of FY 2024.

Nonpoint source projects and programs are continually improved through adaptive management.

Decision-support tools improve nonpoint source management.

Under Action Plan II, GLRI federal agencies partnered with states to develop weather-based forecasts to help farmers avoid nutrient application when the chance of runoff is high. Runoff Risk Advisory Forecasts have been developed for Wisconsin, Michigan, Minnesota, and Ohio, and are being developed for other Great Lakes states. Under Action Plan III, GLRI federal agencies and partners will promote adoption of these tools and assess how effective they are at reducing phosphorus loads.



Pictured right: The Ohio Applicator Forecast is designed to help nutrient applicators identify times when the weather-risk for applying nutrients is low. The risk forecast is created by the National Weather Service and takes into account snow accumulation and melt, soil moisture content, and forecast precipitation and temperatures.

FOCUS AREA 3

Measures of Progress with Annual Targets	Baseline/ Universe	FY 2020 Target	FY 2021 Target	FY 2022 Target	FY 2023 Target	FY 2024 Target
<ul style="list-style-type: none"> 3.3.1. Nutrient monitoring and assessment activities conducted. 	Baseline: 30 Universe: N/A	30	30	30	30	30
<ul style="list-style-type: none"> 3.3.2. Nutrient or stormwater runoff reduction practices or tools developed or evaluated. 	Baseline: 10 Universe: N/A	10	10	10	10	10

"Baseline" and "Targets" for Measure 3.3.1 identify the regularly expected monitoring and assessment activities conducted annually. "Baseline" and "Targets" for Measure 3.3.2 identify the regularly expected practices or tools developed or evaluated annually. "Targets" are not cumulative. "Universes" are not applicable.

Under Action Plan III, GLRI federal agencies and their partners will continue to apply adaptive management to maximize nonpoint source-control efforts using a three-pronged strategy:

1. Continue the edge-of-field monitoring studies underway in agricultural priority watersheds, and establish new sites to test the effectiveness of innovative practices such as bioreactors;
2. Use the tools and lessons learned under Action Plan II to optimize outcomes of nutrient and stormwater reduction projects; and
3. Promote development of new strategies for nonpoint source control, such as market-based approaches, nutrient recovery, and manure transformation technologies.

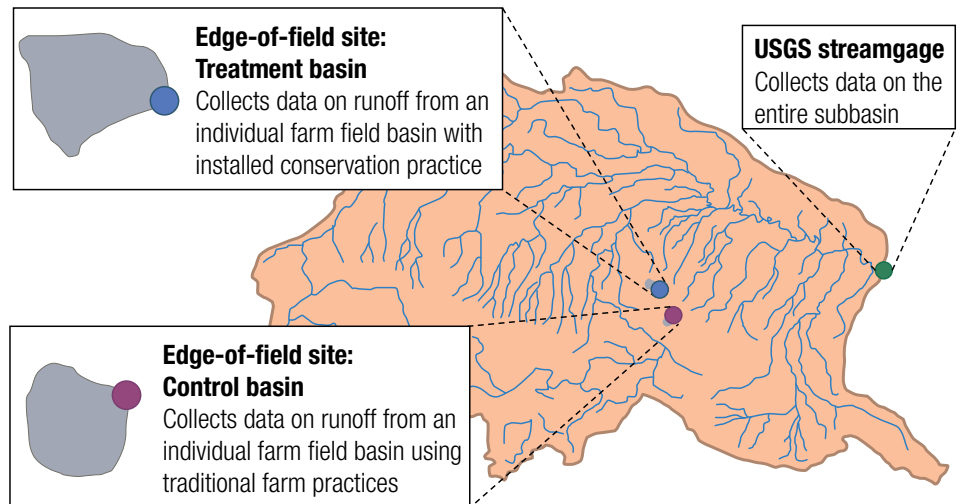
Effectiveness monitoring of nonpoint source runoff in urban (top) and agricultural (bottom) settings.



Annex 4 of the Great Lakes Water Quality Agreement calls for coordinating binational actions to manage phosphorus concentrations and loadings, and other nutrients if warranted, to control the growth of nuisance and toxic algae. Under Action Plan III, GLRI federal agencies and partners will continue to coordinate efforts to control and monitor nutrients in support of Annex 4 goals.

A typical agricultural edge-of-field study takes at least eight years. Water quality data is collected downstream of fields and at the outlet of the watershed to measure improvements in water quality associated with agricultural conservation activities.

Under Action Plan II, six edge-of-field monitoring sites were established to evaluate the impact of nutrient-reduction activities in the priority agricultural watersheds. In addition, GLRI federal agencies and partners are monitoring the effectiveness of stormwater runoff reduction projects at four sites. The information learned from these studies will be used to improve future project designs so that water quality benefits can be maximized.



HABITATS AND SPECIES

Objective

4.1. Protect and restore communities of native aquatic and terrestrial species important to the Great Lakes.

Commitment

- Identify habitats that support important Great Lakes species and take actions to restore, protect, enhance, and/or provide connectivity for these habitats.



GLRI will continue to support people and communities to better understand coastal processes under protected settings, including those in the Apostle Islands National Lakeshore (left photo), and implement the best approaches to restore the interface of the Great Lakes and shorelines where species and people interact, including, for instance, the Chicago waterfront (right photo).

Since GLRI began, GLRI federal agencies and their partners, including states and tribes, have worked to protect, restore, and enhance habitat in the Great Lakes basin.

Key accomplishments include:

Bringing Back the Great Lakes Piping Plover: Protecting its habitat and increasing the number of breeding pairs to 67 (as of 2018) over a much wider area of the Great Lakes, including breeding pairs identified in Illinois, Wisconsin, Pennsylvania, and New York.



Lake Sturgeon Recovery: Multiple Great Lakes tributaries have been selected for rearing and release of juvenile lake sturgeon to increase the population size in Lake Michigan and Lake Erie. The barriers to the successful return and spawning of lake sturgeon in Great Lakes tributaries are being addressed through innovative fish-passage projects such as those on the Menominee River in Wisconsin and the Boardman River in Michigan. A comprehensive approach was taken to make sure this long-lived, prehistoric fish remains in the Great Lakes for future generations.



Coastal Wetlands Protection: The GLRI has provided the resources necessary to assess, protect, and restore many of the remaining coastal wetlands across the Great Lakes. Partners across the basin have accelerated protection of remaining high-quality coastal wetlands and undertaken efforts to bring back coastal wetlands lost to human development and drainage practices. An example of such a coastal wetland restoration is the Howard Farms Restoration Project in Curtice, Ohio, which will restore 568 acres of coastal wetlands, restore hydrologic exchange with Lake Erie, provide fish nursery habitat, and provide stopover habitat for migrating birds and waterfowl. GLRI investments from FY 2015 through FY 2018 have protected or restored over 52,000 acres of coastal wetlands across the Great Lakes.



FOCUS AREA 4

Measures of Progress with Annual Targets

Measures of Progress with Annual Targets	Baseline/Universe	FY 2020 Target	FY 2021 Target	FY 2022 Target	FY 2023 Target	FY 2024 Target
<ul style="list-style-type: none"> 4.1.1. Acres of coastal wetland, nearshore, and other habitats restored, protected, or enhanced. 	Baseline: 370,488 Universe: 1,550,000	394,000	406,000	418,000	430,000	442,000
<ul style="list-style-type: none"> 4.1.2. Miles of connectivity established for aquatic species. 	Baseline: 5,289 Universe: N/A	5,700	5,900	6,100	6,300	6,500

"Baselines" identify results through FY 2018. "Targets" are cumulative. "Universes," when applicable, represent the total number possible.

Under GLRI Action Plan III, GLRI federal agencies and their partners will build upon and maintain past GLRI investments while recognizing where additional habitats and emerging issues are important to targeted species. Examples of such projects include: restoring riparian habitat corridors and riverine wetlands associated with significant fish barriers already removed and/or bypassed; further connecting high-quality terrestrial and aquatic habitat areas; and reducing impacts of human activities such as trash, litter, and debris in our waters. GLRI federal agencies and their partners will strategically collaborate between the GLRI invasive species and habitat restoration activities to reduce the possibility of past investments regressing due to invasive species occurrence.

GLRI federal agencies and their partners will continue to support projects that increase coastal communities' understanding of lake processes important to habitats and species. Collaborative partnerships will pursue innovation related to the use of natural and nature-based features that will enhance coastal ecosystem function and, when possible, consider the beneficial use of dredged material to create new habitats for species important to Great Lakes stakeholders. Projects will be initiated that use lessons learned from past efforts and address fragmented habitats by connecting habitats important to key species and communities to increase their resilience. Sound, cutting-edge science and tools will guide future GLRI-funded efforts to maximize their conservation value.



Lake trout (above) and native prey fish species (below) such as cisco and bloaters are important native fish species to the open lake food web and a focus of GLRI restoration activities.



EPA Administrator Wheeler announces Trash-Free Great Lakes Grant Program to be offered in FY 2020.



Benefits of GLRI dam removal and stream channel restoration on the Ottaway-Boardman River include great recreational opportunities for paddling and fishing.

FOCUS AREA 4

HABITATS AND SPECIES

Objective

4.2. Increase resiliency of species through comprehensive approaches that complement on-the-ground habitat restoration and protection.

Commitments

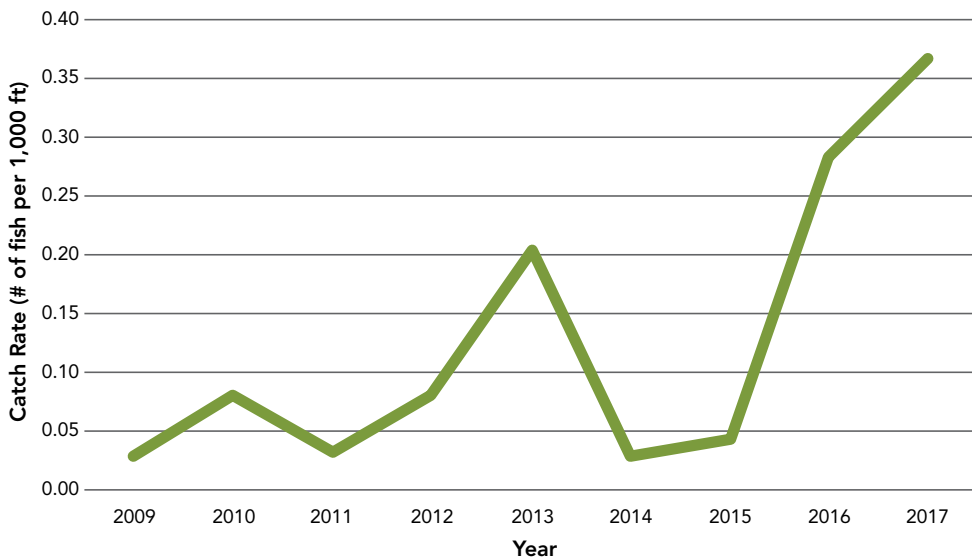
- Update and implement recovery actions for federal threatened, endangered, and candidate species.
- Support population-level protections, enhancements, and reintroductions for state, tribal, and Great Lakes native species of importance.

Since GLRI began, GLRI federal agencies and their partners have worked to maintain, restore, and enhance populations of native fish and wildlife species. This was accomplished through multi-jurisdictional and stakeholder groups, including the Council of Lake Committees, the Upper Mississippi and Great Lakes Region Joint Venture, the Great Lakes Coastal Assembly, the Lakewide Action and Management Plans, and others. Focus Area 4 will continue to be responsive and direct efforts to advance science needs, as well as support species reintroductions informed by changing Great Lakes conditions and management strategies.

GLRI federal agencies responded to needs of fish and wildlife management agencies through activities such as assessments of top-level predators in the open lakes, including lake trout and other salmonids, and assistance in the reintroduction of native prey species to support a healthy ecosystem and sustainable fishery. GLRI federal agencies will continue to be responsive to Great Lakes states, tribes, and communities and provide needed science, complement other restoration efforts, and address emerging issues.



Juvenile Lake Sturgeon Catch Rate – Northern Green Bay
Michigan Department of Natural Resources Gill Net Assessment Data



Establishment of juvenile sturgeon-rearing trailers at strategic locations and release of reared individuals (top two photos on the right) in future years is expected to continue to increase population numbers of this iconic fish species to more resilient levels (bottom photo on the right).

FOCUS AREA 4

Measure of Progress with Annual Targets	Baseline/ Universe	FY 2020 Target	FY 2021 Target	FY 2022 Target	FY 2023 Target	FY 2024 Target
<ul style="list-style-type: none"> 4.2.1. Species benefited where actions have been completed to significantly protect or promote recovery of populations. 	Baseline: 0 Universe: N/A	1	2	4	6	8

“Baseline” identifies results through FY 2018. “Targets” are cumulative. “Universe” is not applicable.

Under GLRI Action Plan III, GLRI federal agencies and their partners will continue to work to maintain, restore, and enhance the habitats of native fish and wildlife species in order to increase the resiliency and overall health of these species. Protection and restoration of federally listed species will be rooted in past successes from across the Great Lakes. GLRI federal agencies have identified a subset of federally threatened, endangered, and candidate species for demonstrating how GLRI investments can have the greatest impact in a relatively short time period. Agencies will maximize habitat improvements for aquatic and terrestrial species through collaborative conservation and monitoring at local and regional scales. This conservation network approach will especially benefit breeding marsh birds, such as rails, grebes, bitterns, black and common terns, and other species that rely on high-quality coastal wetlands.

GLRI federal agencies and their partners will target species protection, restoration, and enhancement projects based on consensus-based Great Lakes restoration and conservation plans developed by GLRI federal agencies, states, and tribes. Future projects will support population-level enhancements, reintroductions, and tracking of state, tribal, and other Great Lakes native species of importance. Expected outcomes will include avoiding species extinction, identifying key habitats and the factors that limit species recovery, and increasing or protecting population levels.

GLRI federal agencies and their partners will evaluate population dynamics to aid in successfully maintaining fish and wildlife communities. Results of annual project evaluations will be used to prioritize locations and species to be targeted in future projects. Drawing from western science and traditional ecological knowledge, GLRI federal agencies and their partners will continue to support protection of native species that have cultural, subsistence, and economic value.

Examples of species that may benefit under this measure during Action Plan III include, but are not limited to:

- Lake trout
- Native prey fish
- Wild rice
- Dwarf lake iris
- Great Lakes piping plover
- Pitcher's thistle
- Breeding marsh birds
- Lake sturgeon
- Brook trout
- Native freshwater mussels
- Lakeside daisy
- American Hart's-tongue fern
- Chittenango amber snail
- Mitchell's satyr
- Poweshiek skipperling
- Moose
- Rusty patched bumble bee



Protection and restoration of wild rice, such as shown above in the Kakagon Sloughs on the Bad River Reservation in northern Wisconsin, will continue to be a priority. Wild rice is a plant of significant cultural value to Great Lakes tribal nations.

FOCUS AREA 5

FOUNDATIONS FOR FUTURE RESTORATION ACTIONS

Objective

5.1. Educate the next generation about the Great Lakes ecosystem.

Commitment

- Support experience-based learning opportunities for youth to promote Great Lakes stewardship.



Removal of an invasive plant species.



CGLL Shipboard Science Workshop on the Research Vessel Lake Guardian.



Park visitor being educated on Lake Sturgeon.

Since GLRI began, GLRI federal agencies and their partners promoted Great Lakes ecosystem education and stewardship through a focus on training educators and engaging people through place-based experiential learning. Partners implemented a number of activities to promote Great Lakes-based environmental education and stewardship, including:



- The Center for Great Lakes Literacy (CGLL), a Great Lakes Sea Grant Network program, which seeks to develop a community of Great Lakes-literate educators, students, scientists, environmental professionals, and citizen volunteers dedicated to improved Great Lakes stewardship;



- The Great Lakes Bay Watershed Education and Training Program (B-WET), which provides hands-on environmental activities that are aligned with academic learning standards; and



- National Park Service interpretive programs, which offer hands-on experiences, educational resources, and networking opportunities to promote Great Lakes literacy among an engaged community of educators, scientists, and residents.

Collectively, CGLL, B-WET, and other education projects resulted in the training of more than 2,200 educators from FY 2015 through FY 2018, who in turn have provided hands-on experiential learning to an estimated 200,000 students.



Educators being trained at a Professional Development Day.



GLRI trained educators across the Great Lakes (FY 2018).

FOCUS AREA 5

Measure of Progress

- 5.1.1. Youth impacted through education and stewardship projects.

Under GLRI Action Plan III, GLRI federal agencies and their partners will continue to promote Great Lakes-based ecosystem education and stewardship for K-12 school students and other interested community members (for example, courses at parks, nature centers, museums, zoos, and on-board vessels).

GLRI agencies and their partners will continue to support activities centered on providing experience-based learning opportunities, with an emphasis on youth. GLRI federal agencies and their partners will also continue to develop Great Lakes-literate educators using the essential principles and fundamental concepts included in the Great Lakes Literacy curriculum.

These activities will support the overall goal of impacting as many youths as possible over time to foster Great Lakes stewardship, promote conservation, and expose and prepare under-represented youth for higher education opportunities in natural resource management. Where appropriate, activities will encourage opportunities to incorporate traditional ecological knowledge and cross-cultural learning. GLRI activities will also evaluate the effectiveness of education programs.



Park Rangers educate a youth group on ways they can improve the ecosystem.

The Center for Great Lakes Literacy is a collaborative effort led by Great Lakes Sea Grant network educators throughout the Great Lakes watershed. The center fosters informed and responsible decisions that advance basin wide stewardship. Educators use Great Lakes Literacy Principles, developed by education leaders in the Great Lakes Sea Grant network, as a framework for communicating key scientific concepts and the important connections between humans and the Great Lakes.



National Park Rangers introduce early learners to the Great Lakes ecosystems.

FOCUS AREA 5

FOUNDATIONS FOR FUTURE RESTORATION ACTIONS

Objective

5.2. Conduct comprehensive science programs and projects.

Commitments

- Assess overall health of the Great Lakes ecosystem and identify the most significant remaining problems.
- Identify cross-cutting science priorities and implement projects to address those priorities.



GLRI agencies use indicators to assess status and trends of the Great Lakes ecosystem.



GLRI agencies assess conditions of nearshore and coastal zones.

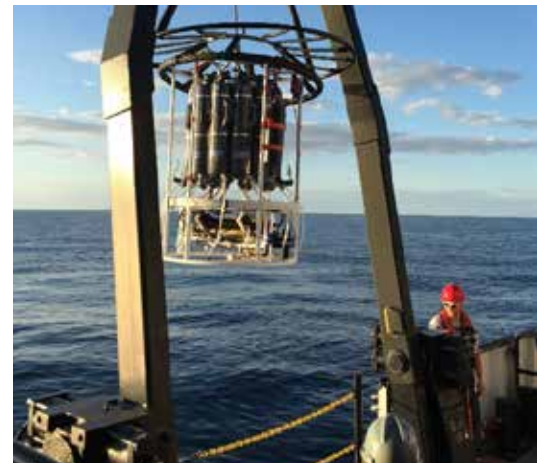


GLRI agencies assess the overall health of the Great Lakes.

Since GLRI began, GLRI federal agencies and their partners have worked together using a science-based adaptive management approach to investigate complex scientific issues that affect multiple focus areas. These agencies and their partners used GLRI resources to monitor and assess the overall health of the Great Lakes. This work has contributed to the identification of current and emerging challenges to Great Lakes water quality and ecosystem health, which helps agencies evaluate the effectiveness of programs and policies. Part of this work includes the use of a suite of nine indicators of ecosystem health, in conjunction with 45 sub-indicators, to support U.S. commitments under the Great Lakes Water Quality Agreement. More than 200 government and non-government Great Lakes scientists and other experts worked to assemble available data, including annual monitoring data from the research vessel *Lake Guardian* pictured below, in this international effort. GLRI federal agencies and their partners have implemented targeted projects such as studying the causes and impacts of harmful algal blooms and *Cladophora*—two environmental issues that are caused by excess nutrients, influenced by invasive mussels, and have impacts on fish, wildlife, and humans.



Large research vessels allow scientists to test water quality and the health of bottom sediments near the coastline and far offshore. Cylindrical, multi-chambered “Rosette” samplers are used to collect water. Small metal “Ponar” samplers are used to scoop up and retrieve sediments.



FOCUS AREA 5

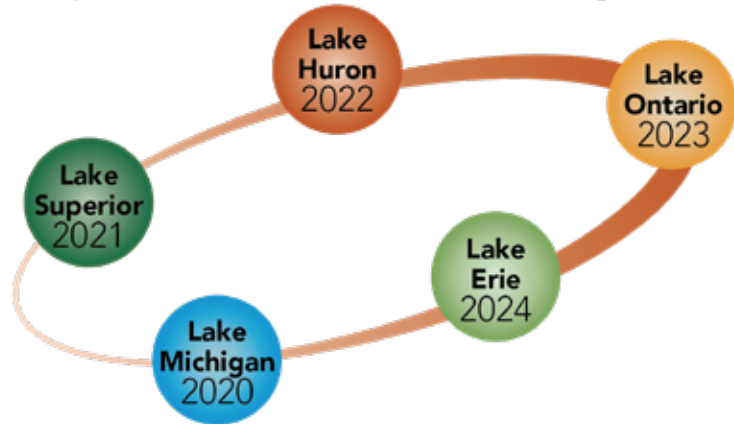
Measures of Progress

- 5.2.1. Annual Great Lakes monitoring conducted and used to prioritize GLRI funding decisions.
- 5.2.2. Identify and address cross-Focus Area science priorities to support implementation of GLRI and the Great Lakes Water Quality Agreement.

Under GLRI Action Plan III,

GLRI federal agencies and their partners will continue to investigate the most significant ecological problems in the Great Lakes. Monitoring the health of the Great Lakes at different scales will remain a priority, including, but not limited to, monitoring of: contaminants in Great Lakes fish, water quality and the lower food web in the offshore waters, and excess nutrients and harmful algal blooms in priority areas. GLRI federal agencies and their partners will identify and address cross-Focus Area science priorities to support implementation of the GLRI and the Great Lakes Water Quality Agreement. They will also continue to develop new tools for monitoring and forecasting, measure project effectiveness, prioritize management activities, and consider environmental and health outcomes.

Cooperative Science and Monitoring Initiative



The GLRI-enhanced Cooperative Science and Monitoring Initiative coordinates scientific work to support Great Lakes management. Enhanced monitoring and field activities are conducted in one lake each year, tied to priorities identified by the Lake Partnerships.

Science Highlights



GLRI federal agencies and their partners have developed new approaches to detect harmful algal blooms in real time. One approach uses an airplane mounted with a hyperspectral camera to capture images and improve harmful algal bloom forecasts when satellite imagery cannot be used due to cloudy conditions. A complementary approach includes a network of real-time continuous-

observing buoys that track detailed water quality conditions (including toxin concentrations) to support modeling, forecasting, and public warnings of harmful algal bloom conditions throughout western Lake Erie.



GLRI federal agencies and their partners are implementing a Great Lakes-wide, coordinated investigation into the factors that contribute to nuisance *Cladophora* algae growth. The collaborative effort relies on several research vessels, scuba divers, and field scientists to better

understand the role of invasive mussels, bottom sediments, water transparency/sunlight, and nutrient levels.



GLRI federal agencies and their partners are developing an innovative Selective Fish Passage Project that matches physical and behavioral attributes of fish with technology and engineering to selectively pass desirable species and exclude invasive species. The project reconnects a watershed to the Great Lakes and will be used to apply lessons learned to other watersheds.

Great Lakes RESTORATION



Interagency Task Force and Regional Working Group Agencies



U.S. Environmental Protection Agency

Great Lakes National Program Office



U.S. Department of State



U.S. Department of the Interior

Bureau of Indian Affairs
U.S. Fish & Wildlife Service
National Park Service
U.S. Geological Survey



U.S. Department of Housing and Urban Development



U.S. Department of Agriculture

Animal and Plant Health Inspection Service
Natural Resources Conservation Service
U.S. Forest Service



U.S. Department of Commerce

National Oceanic & Atmospheric Administration



U.S. Department of Transportation

Federal Highway Administration
Maritime Administration



U.S. Department of Homeland Security

U.S. Coast Guard



U.S. Department of the Army

U.S. Army Corps of Engineers



Council on Environmental Quality



U.S. Department of Health and Human Services

Agency for Toxic Substances and Disease Registry
Centers for Disease Control and Prevention

Exhibit D

Memorandum of Understanding Between the EPA and DNR

Solvay Coke Superfund Alternative Site, Milwaukee, Wisconsin, signed October 10, 2019

**MEMORANDUM OF UNDERSTANDING
BETWEEN
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, REGION 5
AND
WISCONSIN DEPARTMENT OF NATURAL RESOURCES
REGARDING THE OVERSIGHT & ENFORCEMENT
OF REMAINING RESPONSE ACTIONS UNDER STATE LAW
AT THE
SOLVAY COKE SUPERFUND ALTERNATIVE SITE, MILWAUKEE, WISCONSIN**

I. PURPOSE

EPA intends to continue to defer proposed listing of the Solvay Coke Superfund Site (Site) on the National Priorities List (NPL) while the Wisconsin Department of Natural Resources (WDNR) assumes responsibility under state law for the oversight and enforcement of the remaining response actions at the Site. This Memorandum of Understanding (MOU) specifies the plans and expectations of each agency to ensure that the response actions undertaken at the Site will achieve the same level of protectiveness that would otherwise be achieved under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Contingency Plan (NCP) if the Site was listed on the NPL. Consistent with the One Cleanup Program Memorandum of Agreement, signed November 21, 2006, EPA and WDNR intend that the response actions to be completed at the Site will meet the state requirements under Wis. Admin. Code NR 700.

Once the Site is transferred to the state, EPA anticipates that it will continue to defer proposing the Site for listing on the NPL unless EPA receives information of a new release or potential release that poses or may pose an actual or potential threat to human health or the environment or receives information that the response actions completed pursuant to state law at this Site are not CERCLA-protective.

This MOU does not create any right or benefit, substantive or procedural, enforceable by law or equity, by persons who are not party to this MOU, against WDNR or EPA, their officers or employees, or any other person. This MOU does not apply to any person outside of WDNR or EPA.

II. BACKGROUND

Starting in 2001, EPA conducted a series of site assessments to identify the relative threat associated with actual or potential releases of hazardous substances at or from the Site. Based on an evaluation of multiple pathways (ground water, surface and air migration, soil exposure, surface water, and sediments), EPA determined that the Hazardous Ranking System (HRS) score for this Site is greater than 28.50 and, therefore, eligible for listing on the NPL. To address the long-term remedial cleanup associated with the Site, EPA used CERCLA enforcement authority and the Superfund alternative (SA) approach to address the Site. Under the SA approach, EPA utilized the same investigations and cleanup process and standards that are used for sites listed on the NPL.

In 2003, EPA entered into an Administrative Order on Consent (2003 AOC) with Water Street Holdings, LLC, Cliffs Mining Company and Wisconsin Wrecking, LLC. Under the 2003 AOC a removal action was taken to address dilapidated buildings, asbestos containing materials, process wastes

(e.g., tanks containing coal tar and drums of naphthalene), and process system components (e.g., transformers). The majority of the removal work was completed by the end of 2004. Wastes removed during the removal action included, 403 tons of construction and demolition debris, 1,432 tons of coal tar, 4,823 tons of asbestos containing material, 52 tons of rubber tires and belts, and 5,821 tons of recycled steel and other metals.

On January 31, 2007, EPA and a group of potentially liable parties comprised of former owners and operators of the Site, including: American Natural Resources Company, Cliffs Mining Company, East Greenfield Investors, LLC, Maxus Energy Corporation, and Wisconsin Electric Power Company and Wisconsin Gas, LLC (aka We Energies and WEC) (Solvay PRP Group) signed an Administrative Order on Consent to conduct a Remedial Investigation and Feasibility Study (RI/FS AOC) at the Site. The Remedial Investigation was completed in 2016, while the Feasibility Study is not yet complete. The RI/FS AOC required the Solvay PRP Group to complete the RI/FS for both the upland portions of the Site (soil/waste, and groundwater) as well as sediments in the Kinnickinnic River that were impacted by the migration of hazardous substances from the Site.

On August 31, 2017, EPA and WEC entered into an Administrative Settlement Agreement and Order on Consent for Site Fencing/Security, Engineering Evaluation/Cost Analysis and Non-Time Critical Removal Action at the Uplands (U.S. EPA Docket No. V-W-17-C-010) (2017 AOC). Under the 2017 AOC, WEC is required to stabilize the Site by providing site-security, evaluate alternatives and costs for a non-time critical removal through completion of an Engineering Evaluation and Cost Analysis (EE/CA), and to implement the removal alternative selected by EPA through an Action Memorandum. The removal work under the 2017 AOC is ongoing and will not address sediments in the Kinnickinnic River.

WDNR will send a letter to EPA, which the agencies will attach hereto and incorporate by reference as Attachment A. WDNR's letter will request that EPA allow WDNR to implement remedial actions at the Site under formal agreements between WDNR and WEC for both the upland areas of the Site and sediments in the Kinnickinnic River. EPA will respond to WDNR's request in a letter that the agencies will attach hereto and incorporate by reference as Attachment B, stating that EPA will conditionally transfer the Site from potential listing on the NPL to allow WDNR to present its plan to complete the response action under state law to the community and natural resource trustees. The EPA letter will further state that three actions are required prior to EPA transferring lead-agency authority of the Site to WDNR. These actions include:

- 1) WEC completes the non-time critical removal action currently in progress for the upland areas of the Site under the 2017 AOC;
- 2) WEC and WDNR finalize two agreements as follows: one to implement remaining response actions for soils, groundwater and vapor pathways as required for the upland areas of the Site after completion of the non-time critical removal; one to address impacted sediments in the Kinnickinnic River; and
- 3) WEC reimburses EPA's past response costs at the Site.

The WDNR will send a letter notifying natural resources trustees of the proposed transfer of the Site from EPA to WDNR for the oversight and enforcement of remaining response actions under state law, which will be attached hereto and incorporated by reference at Attachment C. The WDNR will post a notice in the newspaper notifying the community of the proposed transfer, including the applicable requirements of Wis. Admin Code, ch. NR 714, which will be attached hereto and incorporated by reference at Attachment F. Concurrently, WDNR will negotiate with WEC enforceable cleanup

agreements (Negotiated Agreements) to conduct the remaining response actions necessary for site closure under Wis. Admin. Code NR 700. Once the Negotiated Agreements have been finalized and signed by all necessary parties, this MOU will go into effect, completing the transfer of the Site to WDNR by the EPA pursuant to this MOU.

III. IMPLEMENTATION

A. State Program

WDNR is authorized under state law to implement a remediation and redevelopment program that ensures that response actions at the Site are carried out and that these actions are protective of human health, welfare and the environment. Furthermore, WDNR has sufficient capabilities, resources, expertise and authorities to ensure that a CERCLA-protective cleanup¹ is conducted and to coordinate with other interested agencies, and the public on different phases of implementation. WDNR's capacity and capabilities are recognized in the EPA and WDNR One Cleanup Program Memorandum of Agreement, signed November 21, 2006, and in this MOU. To the extent there are conflicting provisions, this MOU should be followed.

B. Eligibility of Site for Transfer to the State

WDNR has requested to implement and oversee the remaining response actions at the Site under state law. EPA and WDNR agree that a transfer should address the Site sooner than, and at least as quickly as, EPA would expect to respond.

The Site has been assessed and determined to be eligible for listing on the NPL, but has not been proposed for listing on the NPL. WDNR will not request, nor utilize, federal trust fund money to implement any portion of the actions required by this MOU. This MOU is not a funds-obligating document and does not authorize any transfer of funds from EPA to the state or other entity relating to the Site.

C. Enforceable Negotiated Agreements

WDNR and WEC will enter into an enforceable Negotiated Agreement to implement remaining response actions necessary following completion of the NTCR for the upland area of the Site, which will be attached hereto and incorporated by reference. (Attachment D). Any remaining response actions necessary for site closure shall be conducted in compliance with Wis. Admin. Code NR 700. Under Wis. Admin. Code NR 724.13, all operation and maintenance activities must be carried out in accordance with applicable state or federal public health and environmental laws, and under NR 724.17, any long-term monitoring in accordance with an approved long-term monitoring plan and any other applicable public health and environmental laws. An owner or operator seeking closure under NR 726.05 shall ensure compliance with all applicable federal, state, and local health and environmental laws, and under NR 726.15(1)(d), must operate and maintain the applicable system, cover or containment system in accordance with an approved operation and maintenance plan. For properties with residual contamination where a continuing obligation has been imposed under ch. NR 727, the property owner must comply with the requirements imposed by WDNR and take other actions to operate and maintain the continuing obligations.

¹ The term "CERCLA-protective cleanup" is defined in OSWER Directive 9375.6-11, "Guidance on Deferral of NPL Listing Determinations While States Oversee Response Actions" (May 3, 1995).

WDNR and WEC will enter into an enforceable Negotiated Agreement to address contaminated sediments in the Kinnickinnic River to achieve a CERCLA-protective cleanup, which will be attached hereto and incorporated by reference (Attachment E). WDNR and WEC may undertake a project in conjunction with other parties, including EPA's Great Lakes National Program Office, under the Great Lakes Legacy Act, 33 U.S.C. § 1268(11), as part of a larger project to address contaminated sediments in the Milwaukee Estuary Area of Concern. WDNR, WEC, City of Milwaukee, Redevelopment Authority of the City of Milwaukee, Port of Milwaukee, Milwaukee Metropolitan Sewage District, and Milwaukee County submitted a proposal dated June 2019 for the Milwaukee Estuary Area of Concern to conduct a Feasibility Study, Pre-design Investigation, and Remedial Design, that includes sediments within the Kinnickinnic River, including sediments associated with the Site. If the project proposal is approved the parties will enter into a signed agreement specifying the non-federal share of the cost of the project. Under the Great Lakes Legacy Act the non-federal share of the cost of the project must be at least 35% and may include in-kind contributions. 33 U.S.C. § 1268(11)(E). The project agreement will include the type of in-kind contribution each non-federal sponsor will make, including schedules and specifications for completing the work.

WDNR agrees to take appropriate compliance and enforcement actions to implement the Negotiated Agreements as necessary.

D. Public Notice of Intent to Implement and Oversee the Response at the Site Under State Authority

WDNR will provide notice of the proposed transfer of the Site from EPA to the state to the community through posting in a local newspaper as required by Wis. Admin Code. ch. NR 714, which will be attached hereto and incorporated by reference (Attachment F). The affected community will be provided the opportunity to express any concerns they may have with the transfer of the Site during a 30-day public notice period. In the event that community members request that the EPA reconsider transfer of the Site or request the EPA's intervention in response actions, the EPA agrees to meet with WDNR to discuss the community concerns and to review the response actions in light of this MOU and the EPA's Deferral Guidance, and make a decision regarding whether terminating the transfer is warranted.

E. Natural Resource Trustee Acceptance

WDNR to provide notice of the proposed transferral to the natural resources trustees which will be attached hereto and incorporated by reference (Attachment C).

F. Remedy

WDNR agrees to require WEC to implement a CERCLA-protective remedy meeting the requirements of the Wis. Admin. Code NR 700 series, including attainment of performance standards.

G. Institutional Controls

WDNR will impose continuing obligations to ensure the remedy is protective for the intended land use following remedial activities. Continuing obligations will meet the requirements of Wis. Admin. Code NR 700 series.

H. Oversight

WDNR agrees to provide oversight of remedial action consistent with state enforcement authorities. EPA will have minimal involvement and no routine oversight at the Site.

I. Natural Resource Trustee Notification

WDNR agrees to promptly notify the appropriate state and federal trustees for natural resources of additional discharges and releases at the Site that are injuring or may injure natural resources, and include the trustees, as appropriate, in activities at the Site. WDNR agrees to coordinate any necessary assessments, evaluations, investigations and planning with state and federal trustees.

J. Off-Site Disposal

WDNR agrees to review and approve off-Site disposal location(s) proposed by WEC and/or the Solvay PRP Group prior to use. All approved off-Site disposal locations will comply with State regulations.

IV. PROCEDURAL REQUIREMENTS

A. Roles and Responsibilities

WDNR has responsibility to provide for a timely CERCLA-protective cleanup under state authority and to support the public's right of participation in the decision-making process in compliance with the requirements in Wis. Admin. Code ch. NR 714. WDNR will notify EPA of the proposed remedy.

EPA may request reports, data or other documentation related to the remedial activities at the Site, as it deems appropriate.

WDNR acknowledges that EPA will not provide technical assistance to WDNR for this Site. WDNR also acknowledges that EPA will not provide any Superfund financial assistance to WDNR for this Site. After this transfer is complete, the Site may be evaluated for eligibility for other funding sources such as Brownfields Grants and Great Lakes Legacy Act funding, as applicable.

B. Past and Future Costs

WDNR acknowledges that EPA may pursue WEC, the Solvay PRP Group and other parties for recovery of outstanding past and future EPA response costs at the Site. DNR will not be a party in any cost recovery agreement(s) between EPA and other parties to resolve EPA's outstanding response costs at the Site.

C. EPA Authorization of Response Action

WDNR and EPA duly acknowledge implementation of the remedy under Wisconsin state law following the Wis. Admin. Code NR 700 series must be consistent with CERCLA § 122(e)(6). After the Site is transferred, EPA agrees to document authorization of the transferral in the form of a letter to WEC indicating EPA's approval to implement response actions under the authority of WDNR.

D. Schedule for Performance

WDNR will provide EPA a copy of the signed Negotiated Agreements between WDNR and WEC for informational purposes. WDNR has responsibility for ensuring that response activities are completed in a timely manner and for taking appropriate compliance and enforcement actions for deficiencies as necessary.

E. Documentation Submissions to the EPA

WDNR agrees to make available or require WEC to provide all Site data, reports, and other documentation to the EPA in electronic format, upon request.

V. PUBLIC PARTICIPATION AND NOTIFICATION

WDNR will enforce the requirements for public participation and notification as required by Wis. Admin. Code NR 700 series. Under Wis. Admin. Code NR 714.05, WDNR shall maintain a public database of contaminated sites, including sites with residual contamination and information about any continuing obligations to maintain structural or institutional safeguards in regard to residual contamination. WDNR shall make available to the public for inspection site or facility-specific information and decisions regarding response actions, may hold a public meeting if there is sufficient public interest, and shall maintain a list of persons interested in a specific site and provide those contacts with copies of any WDNR approvals or rejections or site-specific documents including workplans, reports, and requests for site closure. Wis. Admin. Code NR 714.05(1), (3), (4) and (5). Under Wis. Admin. Code NR 714.07(2), WDNR will have WE provide public notification of response actions that are proposed to contain, reduce, or eliminate the threat of contamination at the Site.

VI. COMPLETION OF RESPONSE ACTIONS

A. Site Closure

WDNR agrees to require WEC to comply with the requirements in Wis. Admin. Code NR 700 series and to meet the closure requirements in Wis. Admin. Code ch. NR 726.

Once the response at the Site is confirmed as complete, the Site will not be further evaluated for NPL listing, unless and until EPA receives information of a release or potential release that poses a threat to human health or the environment or receives information that the response actions completed pursuant to this MOU are not protective. Since the Site is not currently proposed to the NPL, it is expected EPA will reassign the Site to the Archive site inventory in EPA's Superfund Enterprise Management System (SEMS). The Status of Site will also be reflected on EPA's SAA webpage.

VII. MOU TERMINATION AND MODIFICATION

The EPA may terminate the MOU at any time after providing 30 days' notice to WDNR.

After a good faith effort to implement the MOU, WDNR may also choose at any time, after 30 days' notice to the EPA, to terminate the MOU for any reason. During any 30-day notice period, the EPA and WDNR agree to meet to discuss the decision to terminate this MOU. Upon termination of the MOU, the EPA will consider taking any necessary response actions, including initiating the rulemaking process to propose and finalize listing the Site on the NPL. The EPA and WDNR agree to coordinate efforts to notify the community of the termination of this MOU or of a modification to this MOU. At the EPA's

request, WDNR agrees to provide to the EPA all information in its possession regarding the Site to the extent permitted by state law.

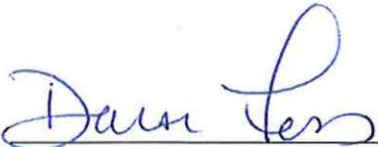
EPA and WDNR may modify this MOU at any time upon mutual consent.

VIII. RESERVATION OF RIGHTS


Notwithstanding any provision of this MOU, EPA and WDNR retain their respective authorities and reserve all rights to take any and all response actions authorized by law. Nothing in the MOU affects any provisions in regulations, including the NCP. No provision of this MOU may be used to create or limit the rights and authorities of any Party or to prejudge what those rights and authorities may be. This MOU creates no right to judicial review.

IX. AGREEMENT APPROVALS

This MOU, as agreed to by the parties, shall become effective once the requirements listed in Section II are met.



Darsi Foss, Division Administrator
Environmental Management Division
Wisconsin Department of Natural Resources



Douglas Ballotti, Director
Superfund Division
U.S. Environmental Protection Agency, Region 5

9-19-19
Date

10/10/19
Date

ATTACHMENTS

- A. Letter from WDNR requesting formal transferral
- B. Letter from EPA suspending Site activities
- C. Communication from WDNR to community and trustee with notification of transferral
- D. Negotiated Agreements between WDNR and WEC for Site Upland Actions
- E. Negotiated Agreements between WDNR and WEC for Sediment Actions
- F. Confirmation of Community Acceptance