

BIPARTISAN INFRASTRUCTURE LAW (BIL)

2022-2023 MIDYEAR REPORT



Wisconsin Department of Natural Resources *Remediation and Redevelopment Program*

EPA Cooperative Agreement No. 4W-00E03302-0



The Stoughton Wisconsin Assessment Monies (WAM) Site

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INTRODUCTION

This mid-year report summarizes the use of CERCLA Sec. 128(a) Bipartisan Infrastructure Law (BIL) grant funds by the DNR, Remediation and Redevelopment (RR) Program, for its state response efforts and public records management system, for the period of Oct. 1, 2022, to March 31, 2023. Activities listed in this report are the equivalent to those identified in Attachment 1 to Cooperative Agreement No. 4W-00E03302-0 titled “Wisconsin DNR’s FY2022–23 Work Plan and Time Frames for Accomplishments (Commitments).”

The DNR uses the CERCLA Sec. 128(a) BIL grant to support state programs, and designated federal programs, under the jurisdiction of DNR’s RR Program, beyond those conducted in the CERCLA Sec. 128(a) annual allocation and which support the RR Program’s strategic framework. Many of the action plan tasks include completion of work items that will improve health outcomes and focus on environmental and health equity by identifying, prioritizing and mitigating vapor intrusion.

The RR Program also utilizes the funding to increase its ability to foster stalled and complex sites through the cleanup process through process improvements, technical oversight, and internal and external training, resulting in cleanup of more contaminated sites. An effort to ensure statewide consistency, quality and tracking of closure submittals and approvals, as well as modifications made after closure, will both reduce exposures to contaminants and enhance the public record.

FINANCIAL STATUS

The U.S. EPA awarded the DNR \$759,968 in CERCLA Sec. 128(a) and BIL grant funding for the Oct. 1, 2022, to September, 2023, grant period. In accordance with available grant accounting information, the DNR is on track to fully expend all grant funding by the end of the grant period. There are no slippages, work plan problems, cost overruns or adverse conditions to report, per 40 CFR Part 31.40.

REPORTING PERIOD HIGHLIGHTS

The DNR effectively puts CERCLA Sec. 128(a) grant funds to work to, among other things:

- Maintain high-quality, online information and resource tools for customers— such as DNR contaminated property database, GIS map, webpages, publications and more
- Deliver resources and assistance on contamination, assessment and cleanup to empower Wisconsin communities
- Offer grant and loan programs that provide valuable resources

The DNR’s RR Program continues to deliver quality services that address the environmental and economic challenges of contaminated sites to improve Wisconsin communities by returning properties to productive use.

FREQUENTLY USED ACRONYMS GUIDE

Association of State and Territorial Solid Waste Management Officials	ASTSWMO	Quality Assurance	QA
Association of Vapor Intrusion Professionals	AVIP	Quality Control	QC
Association for Environmental Health and Science	AEHS	Remediation and Redevelopment Program	RR Program
BRRTS on the Web	BOTW	Responsible Party	RP
Bureau for Remediation and Redevelopment Tracking System		Remediation and Redevelopment External Advisory Group	RR EAG
BRRTS		RR Program Management Team	RRMT
Continuing Obligations Review Specialists	CORS	Site Assessment Team	SAT
Drycleaner and Vapor Intrusion Team	DVIT	Trichloroethylene	TCE
External Advisory Group	EAG	Vapor Intrusion	VI
Limited Term Employee	LTE	Waste and Materials Management	WA
Leaking Underground Storage Tank	LUST	Wisconsin Assessment Monies	WAM
Memorandum of Understanding	MOU	Wisconsin Department of Natural Resources	DNR
Post Closure Modifications	PCM	Wisconsin Housing and Economic Authority	WHEDA

TASK 1 | TIMELY SURVEY & INVENTORY

Identify sites with TCE

Workplan outputs: Identify open and closed NR 700 cases where TCE is present; create inventory of TCE sites

Workplan outcomes: Use information to direct RR Program efforts on these sites; reduce human health risks from TCE exposure

TCE is carcinogenic to people through all routes of exposure, can negatively affect fetal development and presents a variety of long and short-term health risks.

In 2018, the DNR revised its VI guidance, Addressing Vapor Intrusion at Remediation and Redevelopment Sites in Wisconsin (RR-800) to prioritize investigation at sites with TCE. However, at the time, the DNR did not have a mechanism to quickly identify which open or closed environmental sites had TCE detected in media (i.e., soil, groundwater, air, sediment or surface water). As a result, the DNR added the individual chlorinated solvent, TCE, as a specific substance option in the Bureau for Remediation and Redevelopment Tracking System (BRRTS) in January 2019.

The DNR began updating records in BRRTS at sites with TCE to reflect known discharges. At that time, the DNR only had capacity to update active sites, meaning the specific substance option at closed sites and some additional open sites were not added to BRRTS.

In 2021, the DNR began a pilot project to begin a desktop screening of these additional sites. As of March 31, 2023, the DNR has reviewed 13,901 of the 16,867 closed sites with e-documents and updated BRRTS substances accordingly. Of those reviewed, TCE was identified at 1,189 sites, or 8.5% of the closed sites. An additional 11,416 closed sites without e-documents need to be screened for TCE but require DNR staff to scan historical paper files first.

In January 2023, the DNR hired a Limited Term Employee (LTE) to screen open cases with e-documents for TCE. The DNR completed review of open sites in 18 of 72 counties in Wisconsin. Currently, 509 open sites have been identified with TCE.

The information obtained during review of open and closed sites, while on-going, has been instrumental in communicating the prevalence of TCE in Wisconsin communities to internal and external stakeholders and guiding policy decisions.

Complex sites training, including VI and emerging contaminants

Workplan outputs: Attend training conferences; provide expertise and training to other staff and consultants about complex sites

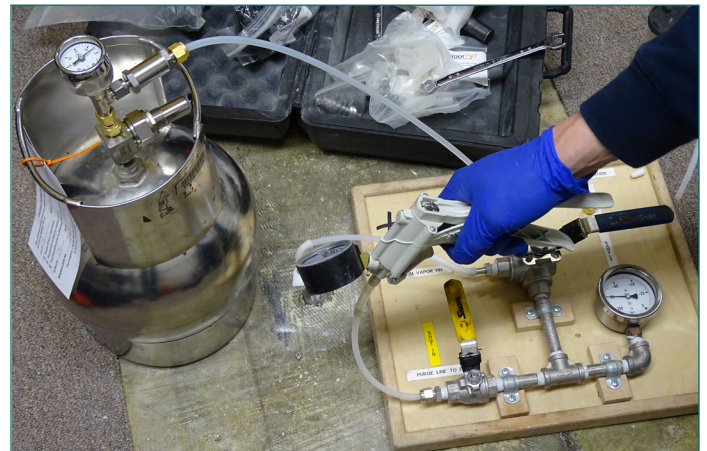
Workplan outcomes: Ensure program is up-to-date on current methods and tools available for complex sites; improved oversight for complex sites

The Drycleaner and Vapor Intrusion Team (DVIT) held a multi-day, in-person training focused on passive sampling techniques, review of vapor action levels, and a detailed evaluation of recent case studies. Significant focus was placed on the contents of the draft Addressing Vapor Intrusion at Remediation and Redevelopment Sites in Wisconsin (RR-800) guidance.

Several DVIT staff attended a multi-day formal classroom training session presented by Kansas State University on radon/chemical vapor mitigation system design and construction. Additionally staff who previously attended the classroom session completed the field portion of the training. The majority of the DVIT staff have now completed this comprehensive training.

The DVIT team leader attended several trainings with professional organizations including the Association of Vapor Intrusion Professionals (AVIP) annual meeting and several other state related meetings. The DVIT team leader continues to provide support to the Interstate Technology and Regulatory Council (ITRC) on VI training.

The DVIT VI technical expert presented at the Association of Vapor Intrusion Professionals (AVIP) annual meeting and at the Association for Environmental Health and Sciences (AEHS) West Coast Conference. Abstracts were accepted for two presentations at the Federation of Environmental Technologists (FET) annual meeting.



Vapor intrusion sampling

DVIT technical support staff continue to provide mentoring for new DVIT team members as well regional staff. The DVIT team expanded during the grant reporting period. One new advanced level hydrogeologist was hired, bringing experience in mitigation system design and operation. Two LTE joined the team to assist with data collection, review and compilation at the VI sites that pose that greatest potential threat in Wisconsin.

TASK 2 | OVERSIGHT & ENFORCEMENT

Strategies for stalled petroleum sites

Workplan outcomes: Develop a strategy to jump start work at high-risk stalled petroleum sites; develop alternative close-out strategies for low-risk petroleum sites where the responsible party (RP) refuses to take action

Workplan outcomes: Stalled petroleum sites are effectively and efficiently conducting response actions to restore the environment

In December 2022, the RR Program management team (RRMT) approved a pre-charter developed by the federal programs coordinator to address stalled leaking underground storage tank (LUST) sites that are either a risk to receptors or require limited work to achieve closure. The final charter was approved in February 2023. The RR Program is currently evaluating available financial resources to address the stalled LUST sites. This effort will include the hiring of four additional LTE to assist with evaluations, work plans, and digitization efforts.

Statewide consistency for historical fill exemption sites

Workplan outputs: Standardizing statewide implementation of protocols and standards for development on sites with historic fill

Workplan outcomes: Improved clarity for construction on historical fill sites; consistent statewide practices; a clear set of standards and best management practices to ensure safe development actions

The Waste and Materials Management and Remediation Redevelopment Integration Team (WA-RR) worked for many months on improving clarity for constructing on or disturbing historical waste sites. The objective of this work is to develop a consistent set of statewide practices. The team completed updates to the *Approval to Construct on/Disturb Historic Waste Fill Template Letter* (RR-5185) and is currently working on:

- Updates to *Development at Historic Waste Sites and Licensed Landfills: Application Process* (RR-683), *Development at Historic Waste Sites and Licensed Landfills: Guidance for*

Investigation (RR-684), and *Development at Historic Waste Sites and Licensed Landfills: Consideration and Potential Problems* (RR-685)

- Updates to *Development at Historic Waste Sites and Licensed Landfills Application* (4400-226)
- Development of Job Aid: Review of Requests for Development at Historic Waste Sites and Licensed Landfills

The WA-RR Integration Team continues to meet monthly and the subgroup working on this topic meets more frequently as needed.

TASK 3 | MECHANISMS & RESOURCES FOR PUBLIC PARTICIPATION

Brownfield stakeholder meetings

Workplan outputs: Host four open-house meetings for local governments, developers, consultants and other stakeholders involved in redevelopment projects

Workplan outcomes: Engagement with customers to aid in discovery and cleanup of potential sites; reduce greenfield loss through brownfields redevelopment; prevent new generation of brownfields sites

A structure for state-wide brownfield stakeholder meetings was discussed with the Land Recycling Team. The proposed structure for the meetings was drafted based on input from the team, and will be fine-tuned in the coming months. Open house meetings will be scheduled with local governments and others to provide opportunities to discuss brownfield sites during the coming months.

External advisory group support

Workplan outputs: Travel and expenses related to attending external advisory group (EAG) meetings

Workplan outcomes: Efficient and effective EAG meetings

As part of its regular annual appropriation for CERCLA s. 128(a), the RR Program coordinates the RR External Advisory Group (RR EAG) to receive constructive and practical input from, and provide information to, interested parties on a wide variety of regulatory and policy issues.

Under the BIL grant, RR program staff traveled to three RR EAG meetings in July and September 2022 and in January 2023 and two subgroup meetings in December 2022 and March 2023.



RR Program employee Michael Prager delivers a presentation

TASK 3 | MECHANISMS & RESOURCES FOR PUBLIC PARTICIPATION

Website improvements

Workplan outputs: Map existing internal and external webpages and redesign workflow/user experience; expand success story map

Workplan outcomes: Improved user experience for customers; enhanced understanding of environmental cleanups; improved awareness of resources and funding available to facilitate cleanups

Partnerships between property owners, local governments and the state have resulted in the successful redevelopment of brownfield properties and produced eye-opening transformations. But the success of these projects and the health and safety of Wisconsin communities depends heavily on decision-makers' awareness of what resources are available, the danger of delaying clean-up efforts and the cost of doing nothing.

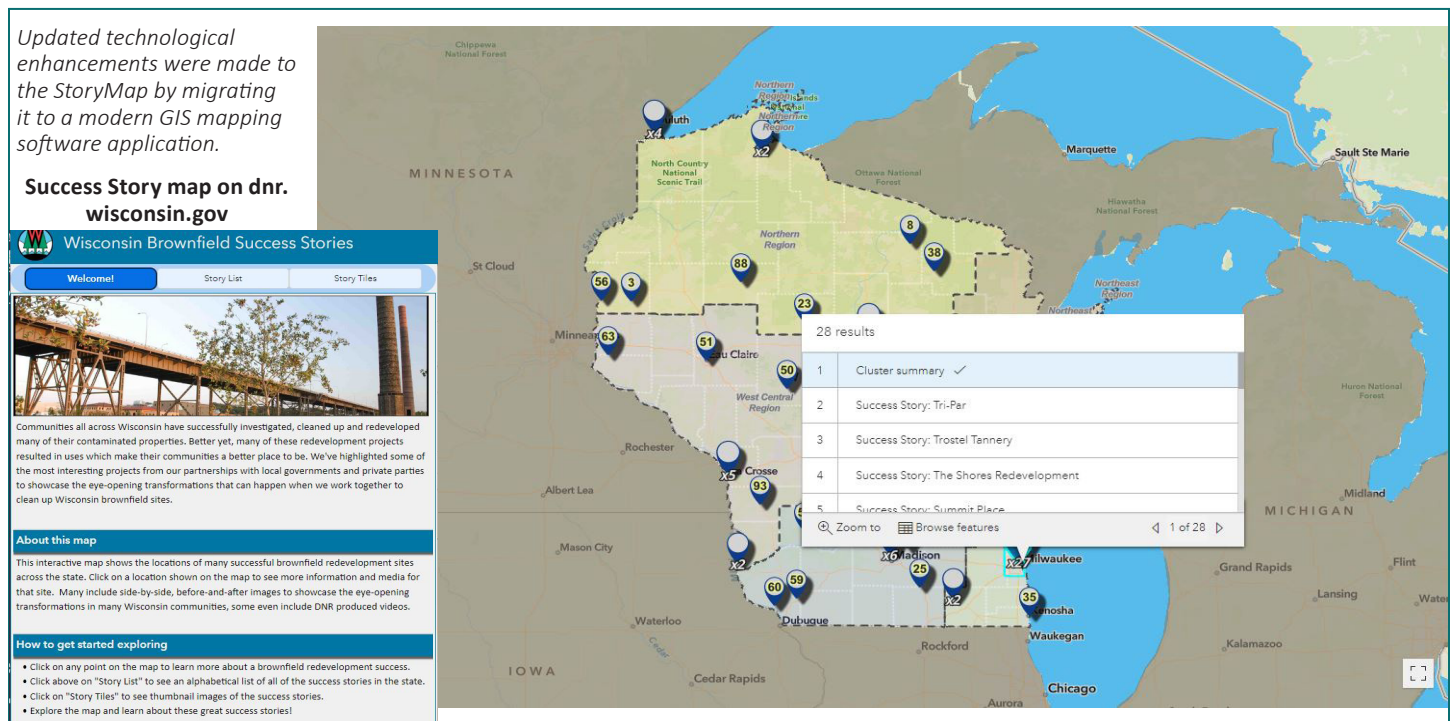
The RR Program Brownfield Success Stories StoryMap (StoryMap) showcases many successful brownfields redevelopment sites across Wisconsin. The StoryMap provides talking points on community-specific redevelopments, examples of the return-on-investment and funding opportunities for tackling brownfields projects, and an overview of the scope and complexity of projects and end-uses. The StoryMap is meant to inspire local governments to action in their own communities and celebrate those who have successfully remediated and redeveloped a brownfield property.

During this reporting period, updated technological enhancements were made to the StoryMap by migrating it to a modern GIS mapping software application. In the past, the StoryMap was only able to host 99 success stories and each story consisted of its own separate document. The new StoryMap application allows for unlimited stories, embedded

content, and in-application editing for a more efficient story creation process. Additionally, a concerted effort is underway to develop an outreach campaign to encourage more communities to share and submit their success stories in hopes to inspire more brownfield redevelopment projects. Adding more stories and a wider scope of stories will better represent the diversity of Wisconsin communities and improve awareness of brownfields overall.

The RR Program continuously refines mechanisms and resources to rally public interest and action toward brownfield redevelopment. During this reporting period, this has been accomplished through user-experience improvements to the internet and intranet. The RR Program internal website was redesigned in Sharepoint to allow for more responsive updates to program resources and better organization and access of information for staff. A new *Project Manager Toolbox* highlights key resources for technical staff to do their work effectively and efficiently. Revamped RR team pages streamline team-specific information and collaboration opportunities statewide.

Forty-five external webpage updates were completed during this reporting period. These enhancements provide a deeper understanding of environmental cleanups for our customers and staff, as well as an improved awareness of resources and funding available to facilitate cleanups.



TASK 4 | MECHANISMS FOR APPROVAL

Audit continuing obligations at sites with mitigation systems and other engineering and institutional controls that control VI risks

Workplan outputs: *Separate project focusing on vapor institutional control audits; verify compliance with VI obligations and effectiveness of systems at closed sites; number of sites will be determined based on results of inventory in Task 1*

Workplan outcomes: *Ensure public health and the environment is protected at cleaned-up properties; reduce human health risks from TCE exposure and other contaminants of concern*

Planning was initiated to start audits of continuing obligations at sites with mitigation systems and other engineering and institutional controls that control VI risks. A meeting will be held in April 2023 to identify sites for audit completion. An audit process and summary form will be developed to ensure consistent use of audit procedures and documentation.

Several sites were recently audited in response to concerns related to ongoing monitoring issues, telemetry system challenges and elevated TCE levels in indoor air that required the relocation of over 150 residents from a newly occupied apartment facility constructed in a former industrial building. The results of the audit work related to these sites will be documented in the annual audit compilation.

Closure condition implementation consistency

Workplan outputs: *Technical oversight and process improvements for consistent implementation of closure conditions at sites with residual contamination and requests for modification of those conditions*

Workplan outcomes: *Ensure public health and the environment is protected at cleaned-up properties; development of efficient processes for closure conditions*

The RR Program has started efforts to review current processes for requesting and reviewing requests for post-closure modifications (PCM). During the review process, RR staff are focusing on developing clearer expectations for external customers, improvements in quality assurance (QA) of the DNR-review of submitted documents, and consistency in quality control (QC) of DNR-produced legally enforceable documents. This work is expected to continue throughout 2023.

Technical oversight of complex sites

Workplan outputs: *Technical review provided at complex sites; geologic, hydrogeologic review, interpretation and response to reports submitted for environmental investigations and proposed remediation; technical review and opinions of special requests*

Workplan outcomes: *Ensure complete investigation and cleanup of complex sites; assist and promote new/innovative and scientifically-sound approaches for the investigation and remediation of complex contaminated sites; ensure investigation and cleanup at complex sites moves forward in a timely fashion*

In Wisconsin, the rules that take a contaminated site through the investigation and cleanup process are the same whether the property is a small corner gas station or a large industrial facility affecting multiple receptors over many square miles. To ensure that larger, more complex sites make meaningful progress and move through the regulatory process efficiently, the RR Program has dedicated a team of experienced staff to provide technical assistance.

During the reporting period, a new program coordinator was recruited and hired to serve as the RR Program's complex project expert. This new hire completed the onboarding process and moving forward, they will provide focused attention and response to challenges encountered on complex sites currently undergoing investigation and cleanup in the state.



Gas station remediation project in DeForest

TASK 4 | MECHANISMS FOR APPROVAL

Complex sites training, including (VI) and emerging contaminants

Workplan outputs: Attend training conferences; develop and maintain technical references, case studies and information related to challenging contaminants and complex sites and methods to assess and address risks they pose; provide expertise and training to other staff and consultants regarding complex sites

Workplan outcomes: Ensure program is up-to-date on methods and tools available for complex sites, improved oversight for complex sites

The Site Assessment Team (SAT) attended a weeklong Hazard Ranking Scoring training presented by U.S. EPA. The SAT sponsor supported Association of State and Territorial Solid Waste Management Officials (ASTSWMO) during the introductory session to share messages about site assessment training and support available through active ASTSWMO membership.

The SAT ITRC point of contact attended a multi-day passive sampler guidance development session and a coordination meeting for increasing involvement in ITRC.

The DVIT held a multi-day in-person training event focused on passive sampling techniques, review of vapor action levels, and a detailed evaluation of recent case studies. Significant focus was also placed on the contents of the draft *Addressing Vapor Intrusion at Remediation and Redevelopment Sites in Wisconsin* (RR-800) guidance that is currently undergoing internal review.

The DVIT VI technical expert presented at the AVIP annual meeting and at the AEHS West Coast Conference. Abstracts were accepted for two presentations at the FET annual meeting.

RR Program technical support staff continue to provide mentoring for new regional staff. One new advanced level



An abandoned building at the site of the former Badger Army Ammunition Facility

hydrogeologist, with experience in complex project evaluation and remediation, was recently hired to support efforts at the VI sites in Wisconsin that pose the greatest potential threats.

Webinars led by RR staff on natural attenuation are planned for internal staff and external consultants later this year.

TASK 5 | ESTABLISH & MAINTAIN THE PUBLIC RECORD

Closure and PCM procedures and tracking

Workplan outputs: Development/improvements to processes for submittals and tracking modifications made to closed sites, develop related guidance and job aids; develop/improve quality assurance/quality control for modifications made to closed sites

Workplan outcomes: Provide the public with access to information and status of contaminated properties; provide stakeholders information on procedures for making modifications to sites that are closed cases

The RR Program executed significant process and database improvements to implement statewide, consistent review of closure decision documentation. Quality control staff, the Continuing Obligations Review Specialists (CORS), were consolidated into a statewide team and meet regularly to ensure consistency, discuss issues and recommendations, and calibrate standards and practices. The CORS team, with input from technical staff and management, identified baseline requirements for QA and QC and clearly outlined responsibilities for each. The CORS team and team leader, the program support team leader, developed several job aids detailing protocol for both the QA and QC stages of review, and created training vignettes for regional project managers to refer to as needed.

Database improvements were made to automate and streamline the review process as much as possible. These improvements included creation of a new module for staging closure packet documents, moving documents between technical staff and CORS for review, and automating tracking of review actions. The RR Program will be evaluating the need to expand these efforts to PCM and closures without continuing obligations.

TASK 5 | ESTABLISH & MAINTAIN THE PUBLIC RECORD



A site being prepared for fill

Historical fill tracking and digitization of records

Workplan outputs: Development/improvements to processes for submittals and tracking sites with historical fill; develop related guidance and job aids; scan and digitize requests and approvals for development on historical fill;

Workplan outcomes: Provide the public with access to information about historic fill

The RR Program made improvements to processes and BRRTS to ensure proper tracking of waste sites, with the goal of protecting public health during private well construction. The RR Program worked with the WA Program to agree upon the different categories of waste sites and under which jurisdiction each would fall.

With that mutual understanding in place, the RR Program was able to implement changes to tracking by splitting sites with known waste into two categories “Historic Waste Site” and “Licensed Landfill.” “Historic Waste Site” means any site with known waste that was never issued a license by the DNR.

Both categories of sites have a banner in BRRTS on the Web

(BOTW) notifying the public that approval is needed from the DNR prior to constructing or reconstructing a water supply well, and DNR approval may also be needed to build or excavate.

In addition to categorizing known waste sites and implementing the BOTW banner, automations were put in place to have RR and WA Program databases “talk” to each other to identify licensed landfills and automatically check the “Licensed Landfill” flag in BRRTS, saving staff significant time tracking.

RR staff are currently manually completing QA/QC for the sites in the database that could not categorize automatically. This, along with digitization of polygons for all “Historic Waste Sites,” will continue into the next reporting period.

TASK 6 | ENHANCE THE RESPONSE PROGRAM OR CLEANUP CAPACITY

Support technical review of U.S. EPA grant-funded deliverables

Workplan outputs: Technical review of non-fee workplans and reports for U.S. EPA grant-funded activities

Workplan outcomes: Ensure technical reports submitted meet NR 700 and grant guidelines

The DNR received a new assessment cooperative agreement (4B-00E03200) awarded August 29, 2022. This cooperative agreement continues to fund the Wisconsin Assessment Monies (WAM) program and expands financial support beyond contractor services to include community managed awards and a broader scope of coverage under both award types.

Staff are currently receiving applications and conducting QAPP reviews. The DNR anticipates this grant will be utilized to support technical review of workplans and reports associated with WAM projects in the second half of this grant period.

TASK 6 | ENHANCE THE RESPONSE PROGRAM OR CLEANUP CAPACITY

Federal and state program support

Workplan outputs: Liaise and represent DNR at Region V meetings; coordinate external reporting requests to state Legislative Fiscal Bureau, stakeholder groups

Workplan outcomes: Ensure program is up-to-date on processes, procedures and initiatives

Two RR staff participated in the U.S. EPA Region 5 - Department of Defense Environmental Restoration Partnership Meeting in Chicago in November 2022. In January 2023, the federal programs coordinator provided Wisconsin-specific information for the ASTSWMO Annual Tanks Update.

In February 2023, eight DNR staff, (including four from the RR Program,) met with U.S. EPA Region 5 staff to provide updates and communications regarding the Resource Conservation and Recovery Act-related programs.



Left to right: Bioremediation at the former Badger Army Ammunition site; sampling at Gruber's Bay.

Administer underwriting for private borrowers for the U.S. EPA RLF program

Workplan outputs: Under a Memorandum of Understanding (MOU) with the Wisconsin Housing and Economic Development Authority (WHEDA), underwrite loans to private borrowers

Workplan outcomes: Increase the number of properties assessed and cleaned up through the issuance of loans to private entities

The RR Program continues working with partners to maximize the impact of federal funding programs. During this reporting period, the RR Program began discussions with WHEDA to form a partnership where WHEDA would provide underwriting services for the DNR to allow the RR Program to lend Ready for Reuse (RFR) funds to private parties in a fiscally secure manner.

Loans to private parties would focus on multi-family or mixed-use redevelopments with affordable housing, satisfying WHEDA's mission "to stimulate the state's economy and improve the quality of life for Wisconsin residents by providing

affordable housing and business financing products" while simultaneously allowing the DNR to make the most of the U.S. EPA at brownfields across Wisconsin. The DNR and WHEDA held several conference calls to explore sister state practices and discuss requirements for underwriting and long-term structuring of notes.

WHEDA is currently working on a proposal for how this would be most effective and efficient for the RR Program. A MOU is expected to be executed in the upcoming months.