

Restoration Notice
for
Saline Branch Restoration Implementation Assistance
Vermilion River Watershed, Illinois

As part of Hegeler Zinc--Lyondell Basell Companies
NRDA Settlement

October 2019

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Preface

Releases of hazardous substances and oil into our environment can pose a threat to human health and natural resources. Natural resources are plants, animals, land, air, water, groundwater, drinking water supplies, and other similar resources. When the public's natural resources are injured by an unpermitted release of hazardous substances or oil, federal law provides a mechanism, Natural Resource Damage Assessment (NRDA), that authorizes Natural Resource Trustees to seek compensation for the public for injuries to natural resources. Illinois' Natural Resource Trustees include Illinois Environmental Protection Agency (IEPA) and Illinois Department of Natural Resources (IDNR). The Illinois Natural Resources Coordinating Council oversees restoration efforts and includes the Trustees and their legal representative, the Illinois Attorney General's Office (IAGO). This plan was developed by IDNR Contaminant Assessment Section (CAS) Staff who administer the NRDA program for Illinois.

This Restoration Notice describes for the public and interested parties the terms of the settlement and the State Trustees approach to restoration with focus on the Trustees' continued support and assistance of a stream restoration project in the watershed.

Introduction

In 2009, Millennium Petrochemicals¹ filed bankruptcy. In an effort to seek compensation for the injuries described within, the Illinois Natural Resource Trustees, represented by the Illinois Attorney General's Office, filed a claim for natural resource damages in the bankruptcy proceeding. Lyondell Chemical Company, et al., provided compensation to the public based on determination that natural resources were injured resulting from releases into the environment of hazardous substances, including but not limited to, metals, such as zinc, arsenic, cadmium, and lead from a former zinc smelting facility in Hegeler, Illinois, originally known as Hegeler Zinc (Figure 1). The settlement, entered in the US District Court on March 12, 2010, provided approximately \$1.5 million to be used for natural resource restoration. In 2013, two plans were drafted, a Work Plan and a Restoration Notice, describing restoration activities carried out with a portion of these funds; and in 2015, \$1 million was "swept" from the Natural Resource Restoration Trust Fund, where this money is administered under 20 ILCS 882 (Natural Resources Restoration Trust Fund Act. ("Swept" is a common phase that refers to the legal process by which the legislative branch and the executive branch allow State funds to be diverted or re-prioritized from the specific use to a more general use). In 2016, a Final Restoration Plan was drafted describing restoration funds provided to the University of Illinois in support of the Shorebird Conservation Acreage via drainage water Runoff Control (SCARC) Project and the Champaign County Forest Preserve District (CCFPD) in pursuit of property acquisitions in the Vermilion River watershed. Also in 2016, a second Restoration Notice was drafted describing an action to aid the restoration planning efforts of another IL NRDA project: Saline Branch Crystal Lake Park in Urbana. This Draft Restoration Notice describes the need for additional funds to support the Saline Branch project implementation.

The Saline Branch Crystal Lake Park project includes stream habitat enhancement in the form of rock riffles and deeper pools along with bank stabilization and vegetation enhancements.

¹ Millennium Petrochemicals is the final corporate successor to the historical chain of operations, and is owned by Lyondell Basell Companies.

NRDA Bankruptcy Claim

The Former Hegeler Zinc Facility (the Site) in Hegeler, Illinois, operated from 1906 to 1954. This ~100-acre facility produced zinc slab and rolled zinc products, as well as sulfuric acid, resulting in slag waste. The large amounts of slag containing unburned residues and metals were stored in piles onsite. Based on the work of the United States Environmental Protection Agency (USEPA), the site was listed on the National Priorities List, or Superfund, in 2005. After which time, USEPA took the lead in a remedial investigation consisting of soil, sediment, and groundwater sampling on and off site. Results showed that contaminants (mostly from various metals) not only affected the smelting site but nearby residences and streams, notably Grape Creek, which is hydraulically connected to the Vermilion River. In 2009 one of the site's responsible parties, Millennium Petrochemicals¹, filed bankruptcy along with other Lyondell entities. In response, IDNR and IEPA, with legal representation by IAGO, prepared an NRDA bankruptcy claim based on injuries to groundwater, surface water (including an Unnamed Tributary and Grape Creek), aquatic resources, and terrestrial resources (including grassland habitat). As a result of this claim, the State Trustees became parties to a Consent Decree approved by the bankruptcy court between the Lyondell entities, the United States of America, and a number of other states and received a settlement of its claim. To make the public whole for injuries to natural resources as a result of releases of hazardous substance, the State Trustees have been funding efforts to preserve and enhance ecological features in the region.

Overall Restoration Planning Vision

The overall goal of the Natural Resource Damage Assessment and Restoration (NRDAR) effort is to restore, enhance, and/or preserve similar resources as to those injured. Target community types for this specific NRDA effort includes, but are not limited to, grassland and stream habitat. At this time funds will likely be spent somewhere off site as USEPA continues to lead the remedial investigation of the Superfund site. Preference will be given to projects in the same general area/watershed of the injury (Hydrologic Unity Code (HUC) 8 Watershed = Vermilion (Wabash Basin); Figure 2).

Restoration Planning Efforts

The Trustees recognize the need to implement activities to provide the most benefit to regional resources. Three previous documents have been drafted describing other activities the Trustees have funded, as well as a fourth document following a more formal restoration plan outline describing two larger restoration efforts the Department is supporting. A work plan was drafted that outlines the use of ~\$15,000 of the HZD NRDA funds for a dam removal monitoring effort, which is being used in cooperation with a federally matched state wildlife grant (IDNR 2013a). A restoration notice was also drafted describing the state NRDA program's assistance with an endangered mussel translocation project (IDNR 2013b). Approximately \$45,000 in NRDA HZD restoration funds were used for the 2013-2018 translocation efforts. A restoration notice was drafted describing the first round of funding assistance (\$85,000) provided to the Saline Branch Crystal Lake Park Urbana project (IDNR 2016a). The Restoration Plan (IDNR 2016b) was drafted describing the Department's support of two larger regional efforts: The SCARC project in coordination with the University of Illinois and other partners; and the pursuit of property acquisition assistance with CCFPD. The workplan, restoration notices, Restoration Plan, and progress/monitoring reports are made available to the public via the IDNR NRDA Program's website: <http://www.dnr.illinois.gov/programs/NRDA/Pages/HegelerZincDanville.aspx>

IDNR CAS staff would like to support another project further described herein: implementation of an instream restoration project along the Saline Branch in Crystal Lake Park, Urbana IL (Figure 3). This project has an approved restoration plan (IDNR 2014), which can be found on the NRDA website at: <http://www.dnr.illinois.gov/programs/NRDA/Pages/SalineSalt.aspx>. There is \$180,000 available for the Saline Branch project per the UofI/Sanitary District/CEDA Inc. Settlement; and \$85,000 was previously utilized from the HZ bankruptcy funds to support modeling and design components of the stream project. A Phase II restoration effort will be implemented later, which includes \$270,000 in restoration funds to be used along the Salt Fork, also per the UofI et al. Settlement. Multiple matching fund sources were pursued for the Saline Branch project but the CAS was unsuccessful in securing additional funds. An additional consideration was made to save funds and implement the project with an IDNR heavy equipment crew (HEC). However, the HEC could not commit to the timeframe needed. Therefore, to complete the project as designed: 3 double rock deflectors, 3 riffles, bank stabilization with rock toe, and a re-vegetation plan for the banks, an additional \$55,000 is required. Utilizing the HZD restoration funds to assist in this restoration effort has been justified because the Saline Branch project is in the same watershed as the HZD area of injury (the Vermilion River Watershed) and similar resources are being addressed (instream and floodplain habitat restoration). Pre-restoration monitoring has been conducted and post restoration will be planned to observe the biological and geomorphological changes over time and ensure project success. The Saline Branch project includes multiple partners including the IDNR, UPD, United States Geological Survey, and the University of Illinois. The involvement of these groups illustrates the community's investment into this environmentally beneficial effort. The 2014 Restoration Plan [Ref: Final Restoration Plan Phase I: Stream & Floodplain Restoration along the Saline Branch Champaign County, Illinois] will serve as the basis for the Illinois NRDA program's assistance.

After funding this restoration effort, approximately \$10,000 will be remaining to expend in the Vermilion River watershed per this bankruptcy settlement.

Compliance

IDNR's Comprehensive Environmental Review Process (CERP) has been applied. CERP coordinates internal reviews of actions funded or performed by IDNR to ensure that they comply with relevant state and federal environmental statutes. Furthermore, the Saline Branch project has appropriate federal, state, and city permits to proceed with the stream restoration effort.

Funding Breakdown:

Total available for restoration via bankruptcy settlement = \$1,516,173

Dam Removal Monitoring	\$15,250.50
Mussel Reintroduction Project	\$45,702.80
Saline Branch Restoration Planning Assistance	\$85,000
Sweep (Re-appropriated via Legislative/Executive Branch Agreement)	\$1,000,000
SCARC Project	134,200
CCFPD Project	\$171,000
Saline Branch Restoration Implementation Assistance	\$55,000
Total Funds Expended	1,506,153.30
Remaining Restoration Funds Available	\$10,019.70

References

- IDNR. 2013a. Work Plan for the Hegeler Zinc Facility, Hegeler ILNRDA Bankruptcy Settlement.
<http://www.dnr.illinois.gov/programs/NRDA/Documents/HZD.WorkPlan.for.restoration.planning-3.1.13.pdf>
- IDNR. 2013b. Restoration Notice for the Continuation of a Mussel Reintroduction Effort Vermilion River Watershed, Illinois.
<http://www.dnr.illinois.gov/programs/NRDA/Documents/HZD.Restoration.Notice.7.31.13.pdf>
- IDNR. 2014. Final Restoration Plan Phase I: Stream & Floodplain Restoration along the Saline Branch Champaign County, Illinois.
<http://www.dnr.illinois.gov/programs/NRDA/Documents/Phase%20I%20-%20Saline%20Branch%20FINALrestplan%20July%202014.pdf>
- IDNR. 2016a. DRAFT Restoration Notice for Saline Branch and Forest Glen Restoration Assistance Vermilion River Watershed, Illinois
<https://www.dnr.illinois.gov/programs/NRDA/Documents/RestNotice.for.ForestGlenSalineBranchAssistance8.25.16.pdf>
- IDNR. 2016b. FINAL RESTORATION PLAN Supporting “SCARC”: Shorebird Conservation Acreage via drainage water Runoff Control And Potential Property Acquisition with the Champaign County Forest Preserve District Vermilion River Watershed Champaign and Vermilion Counties, Illinois
<https://www.dnr.illinois.gov/programs/NRDA/Documents/HZD%20final%20Restoration%20Plan%20SCARC-CCFPD%20Nov2016.pdf>



Figure 1. Photos of the Hegeler Zinc Facility in Vermilion County, IL. Left: an aerial photo of the facility in 1940 (USEPA presentation). Right: a zinc slag pile, residual waste of facility operations (picture taken by CAS staff).

Vermilion River Watershed Projects as of July 2015

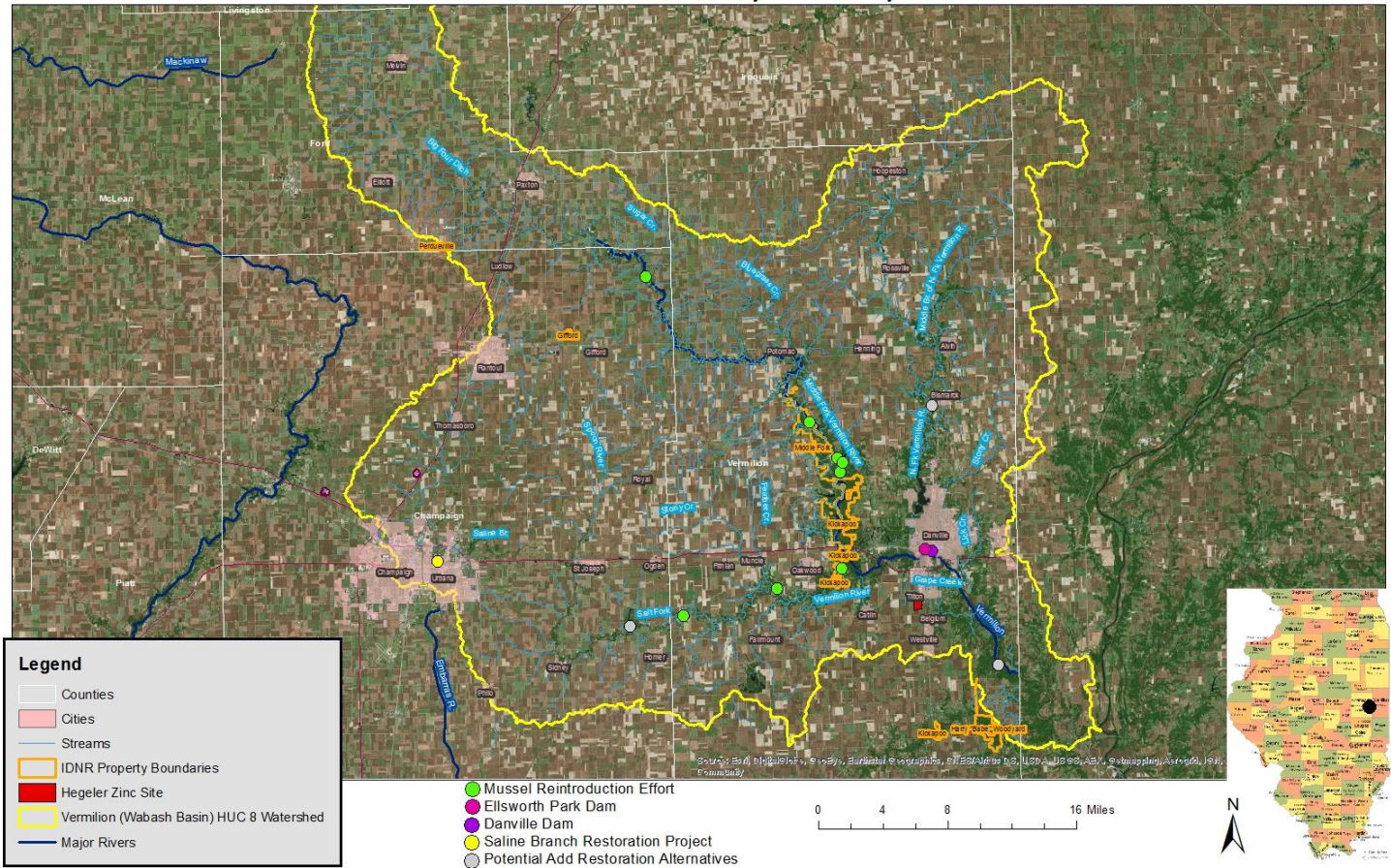


Figure 2. The Hegeler Zinc Facility in Vermilion County, IL and surrounding area, including the mussel reintroduction project area, the Dam Removal locations, and the Saline Branch project site. This map was obtained through IDNR Geographic Information System (GIS). Not depicted are property acquisition sites and the SCARC project areas.

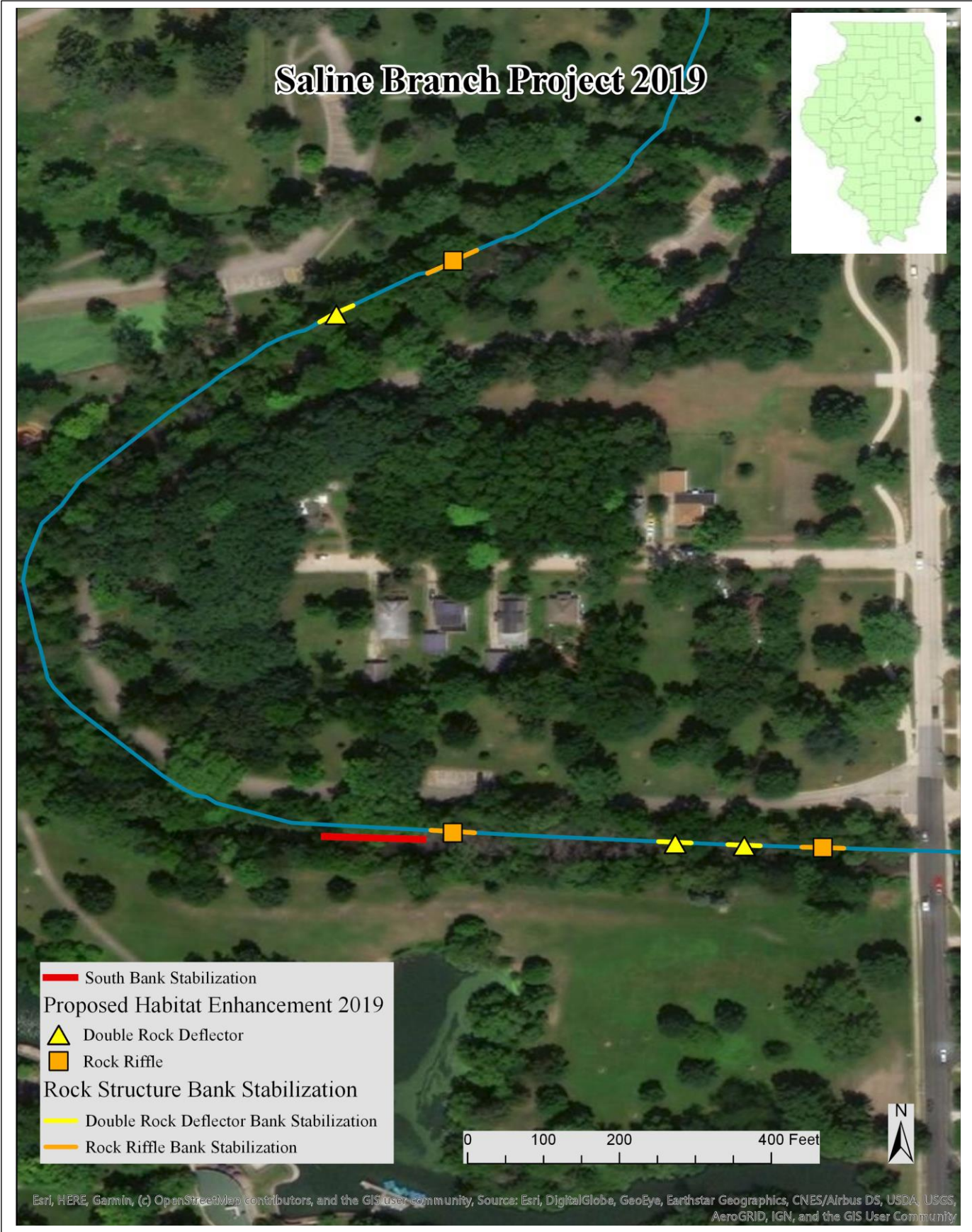


Figure 3. The Crystal Lake Park instream restoration effort in Champaign County, IL. This map was obtained through IDNR Geographic Information System (GIS).
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