

RESTORATION PLAN

*For the Bankruptcies Associated with
Ninth Avenue Dump, Midco I, and Midco II, Lake County, Indiana*

March 1998

*Department of the Interior
U.S. Fish and Wildlife Service*

INTRODUCTION

This restoration project is proposed by Region 3 of the U.S. Fish and Wildlife Service (FWS) and the State of Indiana to compensate for similar natural resources injured (lost) prior to and during remedial response actions at the Ninth Avenue Dump, Midco I, and Midco II, Lake County, Indiana sites. This restoration effort relates to bankruptcy and de minimus settlements received for natural resource damages at these similar sites. This project will be conducted by natural resource trustees under the authority of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and Executive Order 12580.

PROJECT BACKGROUND AND SITE HISTORY

Midwest Solvent Recovery (Midco I) began industrial waste recycling, storage, and disposal at a site in Gary (Lake County), Indiana, sometime prior to June 1973. A fire occurred at this site on December 21, 1976. After the fire, Midco I operations relocated to a second site in Gary and operated as the Midwest Industrial Waste Disposal Company (Midco II).

In June 1981, severe flooding caused water to drain into a neighborhood of the City of Hammond. Contact with this flood water reportedly caused skin burns which were attributed to drainage from Midco I and the Ninth Avenue Dump, located north of Midco I. From February to July 1982, the United States Environmental Protection Agency (EPA) removed and disposed of hazardous wastes from the Midco I site. The surface contamination had been removed; additional contaminated soil and ground water remediation is ongoing. In December 1982, Midco I was placed on the National Priorities List (NPL -- the EPA's roster of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term investigation and remediation under Superfund).

Midco II operations began in January 1977 and included temporary bulk liquid and drum storage of waste and reclaimable materials, neutralization of acids and caustics, and on-site dumping of waste. On August 15, 1977, a fire at Midco II destroyed equipment, buildings, and an estimated 50,000 drums. In 1981, EPA installed a fence around the site. From 1984 to 1986, EPA conducted a removal action, which included fence repair and extension; sampling and removal of drums, tanks, and debris; and removal of the sludge pit and filter bed contents. Midco II was placed on the NPL in October 1984. EPA initiated Remedial Investigations (RI) and Feasibility Studies (FS) in 1985. The RIs for Midco I and II concluded that the 2 sites are contaminated with metals, cyanide, and a variety of organic compounds in the soil and ground water. Past storage and disposal practices on and near the sites have also resulted in a high level of salt contamination in the ground water under both sites. Ninth Avenue

Dump is a 20-acre site just north of the Midco I facility, separated by approximately 350 yards of palustrine wetland. This area between the two facilities consisted of predominately undisturbed dune and swale habitat prior to 1954. Portions of the site were graded and filled between 1954 and 1973 when waste handling operations began. These operations included drum storage, drum burial, tanker truck storage, and disposal of bulk liquid wastes into excavated areas. Wastes accepted at this facility included: oil, paint solvents, sludges, resins, acids, and construction debris. An inspection in 1975 revealed over 10,000 drums were stored on-site. In 1980, over 500 deteriorating drum and 6 abandoned tanker trucks were still on-site. In 1985, EPA recommended that a RI/FS be initiated at this site. Contaminants found on-site included heavy metals, PCBs, solvents, alkylated benzenes, phthalate esters, PAHs, and numerous other organic compounds.

TRUST RESOURCES

Ninth Avenue Dump, Midco I and Midco II sites occur in the Lake Michigan watershed, in northern Lake County. This heavily populated and industrialized part of Lake County is of generally low relief and occupies the bed of glacial Lake Chicago. In this area, beach ridges formed during the different stages of glacial Lake Chicago resulting in dune and swale type topography, which is unique to a small geographic area in northwest Indiana. These dune and swale wetlands provided productive and unique habitats for fish and wildlife. Throughout this portion of Indiana, there has been extensive destruction and degradation of dune and swale habitats. To develop the wetlands, dunes were leveled, sand pits were dug, and the low, wet areas were extensively filled. Only approximately 1,000 acres of dune and swale remnants remain of more than 10,000 acres that existed prior to European settlement of this area. As destruction of dune and swale proceeded, associated plant and animal species became increasingly rare. Dune and swale is now considered a globally-rare ecosystem. The remaining remnants of dune and swale provide the last habitat for a host of now rare species. More than 60 rare plant and animal species are associated with dune and swale habitat in Indiana.

Despite the high level of industrial and commercial use of Ninth Avenue Dump, Midco I and Midco II areas, remnants of dune and swale habitat survived conversion. Activities at these sites led to the degradation of on-site dune and swale habitats. In addition, other dune and swale remnants in the vicinity were potentially impacted. The shallow ground water aquifer provided a pathway for contaminants from these sites to impact off-site resources. Indiana Dunes National Lakeshore and several state-dedicated nature preserves exist in the area near Midco I and II. Gibson Woods is a 130 acre nature preserve located approximately 0.5 mile northwest of Midco I. Shell Dune And Swale (49 acres) and Ivanhoe Dune and Swale (30 acres) are in the same vicinity. Clark and Pine Dune and Swale (42 acres) is located about 0.5 mile east of Midco II. These sites are examples of the once extensive dune and swale topography common to region. They contain complex biological communities, including many rare species of plants and fauna.

This unique area is also important to wildlife because the Southern Lake Michigan watershed provides critical, high quality habitat for thousands of migrating waterfowl, raptors, shorebirds and neotropical migrant birds. The southern tip of lake Michigan supports a variety of biological communities and is known for its extremely rich biodiversity. This area supports extensive wetland habitats, including: riverine wetlands; palustrine forested wetlands; scrub-shrub wetlands; open water wetlands; and emergent wetlands. Both on-site and off-site damages to wetland habitats occurred as the result of activities at Midco I and II sites. These habitats provided feeding, nesting, and/or resting areas for Federal and State trust resources.

Ground water resources were also damaged. Surface water levels are intimately related to ground water in this region due to its shallow aquifer. Surface water drains into wetlands north and east of Midco I. This includes 12 wells potentially in the down-gradient ground water flow direction and which are used for drinking water.

Federal trust resources impacted or potentially impacted:

- migratory birds -- waterfowl, wading birds, piscivorous birds, raptors, passerines.
- Indiana bat (*Myotis sodalis*) - Federally endangered
- Karner blue butterfly (*Lycaeides melissa samuelis*) - Federally endangered
- Eastern massasauga (*Sistrurus catenatus*) - candidate

State trust resources impacted or potentially impacted: (State Status: SE=State Endangered, ST=State Threatened, SC=State Special Concern, WL=Watch List):

- American bittern (*Botaurus lentiginosus*) - SE
- Franklin's ground squirrel (*Spermophilus franklinii*) - ST
- Virginia rail (*Rallus limicola*) - SC
- red-shouldered hawk (*Buteo lineatus*) - SC
- marsh wren (*Cistothorus palustris*) - SC
- mudpuppy (*Necturus maculosus*) - SC
- Blanding's turtle (*Emydoidea blandingii*) - SC
- sora (*Porzana carolina*) - WL
- upland sandpiper (*Bartramia longicauda*) - SE
- least bittern (*Ixobrychus exilis*) - SE
- king rail (*Rallus elegans*) - SE
- northern leopard frog (*Rana pipiens*) - SC
- 9 species of rare butterflies
- all aspects of aquatic life associated with the swale wetlands, including many species of invertebrates, fish, amphibians, and aquatic mammals.
- rare botanical resources found almost exclusively in these globally-rare dune and swale habitats.
- terrestrial wildlife including: mice, shrews, rabbit, raccoon, etc.

RESTORATION PROJECT SITE

The natural resource trustees determined that it was not possible to restore lost natural resource functions and values on site at Ninth Avenue, Midco I and Midco II. Restoring or replacing lost natural resource values off site required finding a site where rare dune and swale habitat existed or could be restored. This project is seeking to protect, through purchase or easement some of the largest remaining unprotected remnants of dune and swale habitat in Lake County, Indiana. Properties purchased would be deeded to a conservation organization such as the Indiana Department of Natural Resources (IDNR) or perhaps the Indiana Dunes National Lakeshore (IDNL) for the purpose of restoring, replacing, and protecting natural resources or habitat similar to that historically found on, or adversely impacted by Ninth Avenue Dump, Midco I and Midco II sites. Any properties acquired by this restoration effort will be held for the sole purpose of conserving and protecting natural resources and habitat on the site.

Restoration Process

This project will involve the voluntary restoration of privately and/or publicly owned lands with perpetual easements offered to the landowner(s) or acquisition of areas that provide services equivalent to those lost at Ninth Avenue Dump, Midco I and Midco II sites. Restoration efforts will focus primarily on acquisition and restoration of degraded dune and swale habitats. If lands are acquired, they will be deeded to the State and/or private land management entities with perpetual easements.

Specific potential properties have not yet been identified; however, numerous remnant parcels are and may become available as interest is expressed. The work done with EPA at the Gary Lagoons non-NPL CERCLA site in Gary has shown that dune and swale restorations are feasible on even some of the most degraded of sites. Final site selection should proceed quickly following project plan approval and funding.

Natural resource damage assessment restoration plans that result in a negligible change in the use of the affected areas have been included as categorical exclusions for National Environmental Policy Act (NEPA) compliance for actions implemented by the FWS (516 DM 6 Appendix 1). Additionally, restoration implementation will likely include those types of activities that are also considered categorical exclusions. The NEPA compliance has been documented in an Environmental Action Statement (attached).

Impacts on Cultural Resources - for any restoration alternatives considered, the potential for project activities to affect prehistoric and historic resources, Native American human remains and cultural objects will be determined early in project planning. To this end, the procedures in 36 CFR 800 implementing Section 106 of the National Historic Preservation Act, requirements of the Native American Graves Protection and Repatriation Act, and policies and standards specified in the Fish and Wildlife Service Manual 614 FW 1-5 will be achieved.

Project Coordination

The BFO will be responsible for overall project coordination and support. BFO will administer project funds according to the proposed budget with appropriate cost documentation. In addition, the Indiana Department of Natural Resources (IDNR) and Department of Environmental Management (IDEM) will be invited to participate in the restoration implementation in accordance with a Memorandum of Understanding, signed August 3, 1993, to cooperatively conduct Natural Resource Damage Assessments.

BFO will work with IDEM and IDNR to identify potential project sites, and coordinate landowner contacts, easement development, and any necessary wetland restoration procedures. Additionally, the National Park Service (Indiana Dunes National Lakeshore) and/or private organizations may assist in the acquisition of and deed restrictions for the proposed site(s).

The natural resource trustees will oversee the implementation of this restoration plan. At the completion of the project, a final report documenting the restoration will be prepared. Pictures of the site, before and after restoration, and key documents (e.g. the Environmental Action Memorandum) will be included

SCHEDULE AND BUDGET

This restoration will be implemented by DOI-FWS, in coordination with IDNR and IDEM, and could potentially be completed during FY 1998. As of September 15, 1997 a total of \$193,073.99 is available for restoration implementation. The entire amount of the DOI-FWS funds will be earmarked for land acquisition(s), easement purchase(s), and/or dune and swale habitat restorations.

Land acquisition efforts will begin with our co-trustees and cooperators as soon as can be accomplished given the administrative processes involved.

Final Report

At the completion of the project, a final report documenting the restoration will be prepared. Pictures of the site(s), before and after restoration, and key documents (e.g., - lease agreements; deeds; the Environmental Action Memorandum) will be included.

PROJECT CONTACTS

Dan Sparks
U.S. Fish and Wildlife Service
Bloomington Ecological Services Field Office
620 S. Walker Street
Bloomington, Indiana 47403
(812) 334-4261