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# **EXECUTIVE SUMMARY**

The Little Calumet River Conservation Action Plan (CAP) presents a framework for improving the health of nature and the quality of life for communities along the six and a half mile corridor of the Little Calumet River from its confluence with the Cal-Sag Channel to its confluence with the Grand Calumet River. The CAP identifies sites that are high priority for acquisition and protection, ecological restoration and management, and connecting communities to the river and landscapes along its banks. It also suggests conservation targets and strategies for each site to achieve the vision. It was created by Openlands, Metropolitan Planning Council, and the Field Museum.

The Calumet region straddles eastern hardwood forests and tallgrass prairies. The alternation of dune and swale habitat creates many niches for plants and animals, resulting in rich habitat that supported vast numbers of species historically. Farming and industrial development in the second half of the 1800s transformed and fragmented the landscape, as marshes and wet prairies were drained, railroads were laid down, and industry was established. Industrial wastes were deposited into the soils and released into the air and water, resulting in contamination of soils, water, and river sediments. The river itself was also deepened and straightened resulting in loss of habitat for aquatic species.

Today, some areas of high quality and remnant habitat still remain, with several sites in the project area owned and managed by the Forest Preserves of Cook County and the Chicago Park District. Industries, landfills, and some properties with known contamination are also prevalent in the landscape today, as is residential and vacant residential land. The river has seen efforts to preserve and improve both ecological and cultural heritage within the project area, enabled by changing use of the land and water, community interest and demand, and multi-stakeholder cooperation. The CAP builds upon the momentum, identifying and prioritizing steps for restoring the landscape and making it accessible to communities that are both strategic and actionable.

Sites were identified as "priority" and conservation targets were assigned by looking at managed areas, open space, and vacant parcels along the river on an interactive map created for this project which includes map layers that illuminate the past

character and current condition of the habitat. Sites were also identified as priority and conservation targets defined through visits and discussions with community leaders and site owners and managers. A matrix of characteristics, including metrics like size, connectivity to other sites, high quality habitat, and connections to neighborhoods, was also created to aid in further prioritization and characterization of the sites and to help define areas that offer opportunities for coordinated restoration.

Conservation targets for the priority sites include native ecosystems, as well as planting of pollinator-friendly native flowering plants. Many of the sites identified in the CAP would need soil remediation before historic communities could be established, but establishment of pollinator-friendly native flowering plants is attainable at all sites. Conservation targets also include animals, some of which are declining species, like the monarch butterfly and shrubland birds. Targets designed to connect communities to natural areas and the river are also priorities. These include stewardship and creation of riverfront open space connected to adjacent neighborhoods as well recreational opportunities like biking, hiking, and water trails.

Overall threats and opportunities are considered in the CAP, including the need for an entity, such as a land trust, that would own Calumet brownfields, and mechanisms and funding for creating or coordinating a maintenance crew that could help maintain restoration, public open spaces, and trails.

# PROJECT GOALS AND METHODOLOGY

The goal of the Little Calumet River Conservation Action Plan (CAP) is to create a framework for connecting a fragmented landscape in order to improve the health of nature and the quality of life for neighbors. The CAP prioritizes conservation actions in the lands and waters along the six and a half mile corridor of the Little Calumet River from its confluence with the Cal-Sag Channel to its confluence with the Grand Calumet River. The CAP identifies sites that are high priority for acquisition and protection, ecological restoration and management, and connecting communities to the river and to the landscapes along its banks. The CAP also suggests specific conservation targets and strategies for each site that can serve as a guide for achieving the vision.

The CAP is an integral part of a strategy undertaken across the bi-state Calumet region to establish Conservation Action Plans in at least nine of the region's critical sub-geographies. The region has valuable conservation assets, but the landscape has been highly fragmented by development and there is a need to address conservation in a holistic way. The plans are intended generally to inform conservation decision-making by coordinating action among stakeholders, using the most recent information, and prioritizing steps that are both strategic and actionable.

In the project area there is a diversity of landowners who own dispersed parcels of varying sizes. The project team created an interactive map to assist in identifying open space and vacant land along the river, and to help assess the general past and current ecological condition of open space sites. A link to the map may be found in the Additional Resources section of this document.

Sites were identified as "priority" for this project by looking at managed areas, open space, and vacant parcels along the river on the interactive map and other maps. The project team (Openlands, Metropolitan Planning Council, and the Field Museum) determined ownership, and established priorities for reaching out to landowners. The team met with the Forest Preserves of Cook County (FPCC), Chicago Park District, Metropolitan Water Reclamation District of Greater Chicago (Water Reclamation District), ArcelorMittal (now Cleveland-Cliffs) Riverdale at Acme Bend, Land and Lakes Landfill, and the City of Chicago. The team also met with community groups and surveyed community members in the neighborhoods of Altgeld Gardens and Golden Gate, just west of Beaubien Woods, to ascertain their interest in open spaces along the river and what amenities they would value there.

The project team visited sites that were either open for public access or where the landowner or manager allowed access. During these visits the team assessed the current habitat, took photographs of the sites, and in many cases, discussed with site owners and managers their visions for the property and what conservation targets and



The project area is located on Chicago's far south side approximately 20 miles from the downtown core. It encompasses over 6 miles of the Little Calumet River roughly bound by I-57 and I-94.

The Little Calumet Coonservation Action Plan builds upon other planning efforts in the area, including the Forest Preserves of Cook County and American Institute of Architects community-based planning for Beaubien Woods and surroundings.



MWRD's SEPA station at SEPA#2. The oxygenated water benefits aquatic life.

strategies they considered feasible. The team visited about half the sites ultimately identified as "priority." The project team considers site inclusion to be an iterative process and is willing to visit more sites within this geography.

The interactive map provided an understanding of the ecological condition of the sites. This information, as well as the assessment of natural communities during visits, allowed the team to develop descriptions of and conservation targets and strategies for each site. In addition, the team developed a matrix of characteristics, including metrics like size, connectivity, high quality habitat, and connections to neighborhoods, to aid in further prioritization and characterization of the sites. Information about sites from forest preserve management plans, and other site plans and reports, were also used to inform the matrix and site descriptions.

The result is a set of overall priority sites, and a set of recommended conservation steps for them, which are discussed, site-by-site, in this CAP.



Dumping and pollution can result in contaminated and uninviting spaces.



View across the Little Calumet River of one of the many marinas located along this stretch of the river.



The project team visting Land and Lakes landfill

# HISTORY OF THE CALUMET REGION

The short six and a half mile reach of the Little Calumet River in Illinois that extends from the Cal-Sag Channel to the confluence with the Grand Calumet River has been deepened, straightened, and lined with an array of land uses that makes its historic character a distant dream. Today's river shows new potential as a corridor for conservation and cultural heritage, enabled by changing use of the land and water, driven by community interest, and supported by multi-stakeholder cooperation.

The corridor sits in the Calumet Region that frames the southern shore of Lake Michigan in Illinois and Indiana. The region has a rich heritage that includes remnants of globally significant ecology, nationally significant industry, and diverse cultures. This reach of the Little Calumet River extends in an east-west direction from the remnants of glacial moraines in the west near Blue Island into the predominantly flat wet prairies and marshes of the post-glacial Lake Chicago plain.

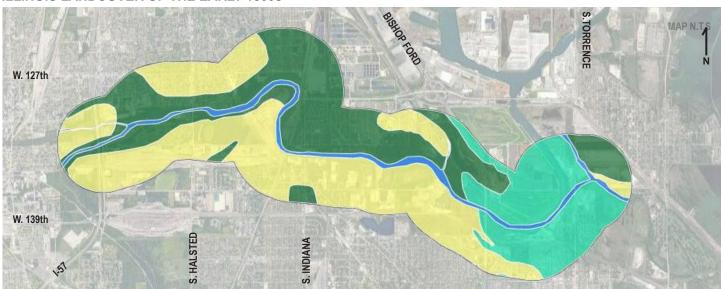
Historically, the landscape held five lakes, Lake Calumet, Hyde Lake, Wolf Lake, Lake George, and Bear Lake, surrounded by marsh, wet prairie, and upland woods. These lakes were originally bays of Lake Michigan, isolated from the lake by littoral sand drift. Lake Calumet and its surrounding area,

including the eastern portion of this study area, is only 3500 years old. The other large lakes are even younger. Nearby Wolf Lake and Hyde Lake are only 2500 years old. Wetlands formed in shallow swales between beach dunes as Lake Michigan became shallower and the landscape rebounded from the removal of the weight of the glaciers. It is still rebounding today. Savannas and woods populated the dune ridges. The area straddles the transition between eastern hardwood forests and tallgrass prairies, and the alternation of dune and swale magnifies the number of possible niches for plants and animals. This incredibly rich habitat suffused and has long supported the lifeworld of Native Americans.

Potawatomi, Ojibwe, Odawa, Meskwaki, Sauk, Hoocak, Ioway, and Myaamia occupied the Calumet Region historically, and still maintain ties to the land and it resources, despite the many federal removal treaties and settler conflicts that disrupted their lives. Many citizens of these tribal nations still live, work, and visit the Calumet. Many other Native People from around the country also live and work in the Calumet Region.

The enormous numbers of dune and swale habitats created a landscape unlike any other part of northeast Illinois and northwest Indiana where 10,000 year old glacial topography predominated. Rare and unique

#### **ILLINOIS LANDCOVER OF THE EARLY 1800s**



Source: Illinois Department of Natural Resources, Illnois Natural History Survey, 2003, Version 6

Woodland

Prairie/Wet Marsh

Bottomland

Little Calumet River

species were represented, surviving in the remnant habitats today. The area was also at the south end of the Lake Michigan migratory flyway, and its woodlands and wetlands were critical in sustaining the enormous numbers of birds that annually passed through.

Beginning in the second half of the 1800s, farming, and then industrial development, resulted in the transformation of the landscape, as marshes and wet prairies were drained, railroads were laid down, and industry was established. Calumet, with its proximity to Chicago, river transportation, and connection to Lake Michigan, was a desired setting for industry. Industries were also attracted by the large swathes of open land, on which they could establish sprawling operations, reserve space for future expansion, store raw materials, and deposit waste. Industrial wastes were joined by municipal wastes, and since the 1970s, sanitary landfills -- many of them now closed or closing -- began to rise above the landscape. Wastes were released into the air and water, resulting in legacy contamination of soil and river sediments. Rivers that coursed slowly across this landscape were strongly influenced by the location of Lake Michigan-paralleling dune ridges. The Calumet River system included two main stems penned in by the ridges, but historic hydrography was to be strongly rearranged by the needs of navigation, industry, and flood control.

Prior to modern settlement, Lake Calumet drained directly to Lake Michigan via the Calumet River. The Calumet River was not connected to today's Little Calumet and Grand Calumet which were once one continuous river looping back to a river mouth in Gary. However, in the first years of the 1800's, Ft. Dearborn soldiers reported that a water flow connection had been made between the Calumet River and the Little Calumet/Grand Calumet River through a large wetland that separated them and today's general pattern was established.

Today the Little Calumet River flows northwest from Indiana and into Illinois. Near present day Blue Island, it turns and flows east, connecting with the Grand Calumet and the Calumet Rivers. There was a large marsh where the river turns east, Saganashkee Slough, stretching 12 miles to the west. A canal was dug through this slough to add waterflow to the I&M Canal. Between 1911 and 1922 the Cal-Sag Channel was excavated into this land, and it was widened by the Army Corps of Engineers starting in 1955. O'Brien Lock and Dam was completed in 1965, and the Little Calumet River was widened between the Cal-Sag Channel and the turning basin at 130th Street. The large bend of the Little Calumet known as Acme Bend was also widened. By 1967, the O'Brien Locks and Dam fully controlled the river system. It maintained a flow from the Little Calumet River westward to the Cal-Sag Channel.



Historic aerial image of the Little Calumet River showing industrial land use in 1939. Image courtesy of the Prairie Research Institute at University of Illinois.



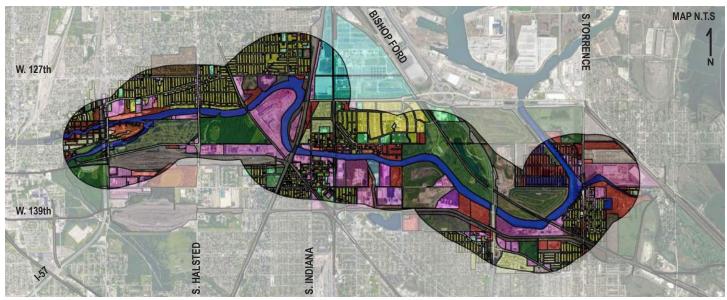
Historic aerial image of the Little Calumet River showing farming and mining in 1939. Image courtesy of the Prairie Research Institute at University of Illinois



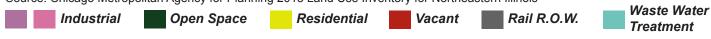
Today the Little Calumet River and surroundings offer views of wildlife, including this coyote and many species of birds such as ducks, birds of prey, herons, egrets, and cormorants.

# PROJECT AREA AND LAND USE

#### **CURRENT LANDUSE**



Source: Chicago Metropolitan Agency for Planning 2013 Land Use Inventory for Northeastern Illinois



# HISTORIC CHARACTERISTICS AND CURRENT LAND USE

The 1821-1840 Public Lands Surveys indicated that, within the bounds of this study area, the river was bordered on the north side by wet prairie or marsh from the O'Brien Lock and Dam to just west of Beaubien Woods. West of this location, on the north bank of the river, the habitat transitioned to prairie, with a small area of widely scattered oaks and patches of open prairie near Indiana Avenue to the river's big bend to the west. The north bank of the river from the Water Reclamation District's SEPA #2 station west to Fay's Point was a continuous stretch of widely spaced oak savanna. On the south bank, marshland bordered the river from the O'Brien Lock and Dam southward and westward for one mile, then it transitioned to wet prairie along the south bank, as far west as the Major Taylor Trail Bridge. A moderately dense savanna transitioned into a woodland at today's Whistler Woods and Joe Louis Golf Course.

Today, some areas of high quality and remnant habitat still remain, most notably the wet, sandy prairie of the Forest Preserves of Cook County's Dolton Prairie, which is a high quality Illinois Natural Areas Inventory (INAI) site. Several more sites are owned by the Forest Preserves of Cook County and managed for biodiversity such as Beaubien Woods and Whistler Woods. The Chicago Park District owns and manages Mittal Woods, where restoration of wetland habitat is underway. Next door to Mittal Woods is the industry Airgas which shares degraded wetlands with Mittal Woods to the west and degraded oak savanna with the Water Reclamation District's SEPA #2 station to the east.

Industries, landfills, and some properties with known contamination, where mitigation methods, such as clay capping have been undertaken, are also prevalent in the landscape today, as is residential and vacant residential land. Waste Management and Land and Lakes both own large landfills. Cleveland-Cliffs operates a steel mill along the river at Acme Bend where steel mills have been located for the last century (named for the Acme steel mill established there a century ago). Other industries operating and owning land within the project corridor include Ashland Chemical, which produces chemical solutions, and Innophos, a food manufacturing supply, among others. Commonwealth Edison (ComEd) owns linear open space, much of it connected,

within the project area. The Chicago Department of Transportation (CDOT) owns partially developed and undeveloped right-of-ways, including street ends at the river, that comprise open space, and open space connections. A coordinated plan for restoration and maintenance of these connections, industries, and landfills would improve the ecological health of this geography.

#### CONTAMINATION AND REMEDIATION

One of the more challenging aspects of the project area is the contamination of the landscape and river sediments. Sewage and industrial liquid waste were discharged into the Little Calumet River for almost a century, beginning in the late 1800s. It wasn't until the 1970s that the legal framework was in place to prevent point source pollution. Significant pollution now entering the river comes from non-point sources driven by rain and wind from unmanaged or uncapped brownfield pollutants. These pollution sources are minimally regulated by the Illinois Environmental Protection Agency (IEPA), the City of Chicago, and the Water Reclamation District. Improvements to the IEPA-permitted effluent standards at the Calumet treatment facility continue to be advocated by environmental advocacy organizations.

Efforts to improve water quality and aquatic habitat are underway both within the study area and the larger landscape in which it is embedded. To the north of the study area is the Water Reclamation District's Calumet sewage treatment plant and the agency's purview over storm and floodwater management directly affects the prospects for conservation in the study area. The Water Reclamation District operates one of five Sidestream Elevated Pool Aeration (SEPA) stations in the project area, SEPA #2. Here water from the river is pumped into an elevated pool where it then flows over a series of waterfalls back into the river, resulting in greater oxygen levels in the water, improving habitat for aquatic life. In 2018, 22 fish species were found during a survey on the Little Calumet River and Halsted Street, including banded killifish, a threatened species in Illinois.

In several areas of the stream bank itself, crevices that comprise catfish habitat have been created by Friends of the Chicago River. The Water Reclamation District also began disinfecting wastewater from their Calumet Plant in 2015, to reduce pathogens, including

bacteria and viruses, discharged into the river. Like other parts of the Chicago River System, water quality in the Little Calumet River has been improved by the Water Reclamation District's Tunnel and Reservoir Project (TARP) by which stormwater is captured and treated before being released into the river. However, there are still combined sewer overflows of untreated storm and wastewater during storms when TARP becomes overwhelmed. In addition, there are other water quality problems, such as elevated chloride levels and low dissolved oxygen, as well as a need for aquatic habitat improvements.

#### **CULTURAL HISTORY**

The study area has a rich cultural history. The Altgeld Gardens neighborhood west of Beaubien Woods was the birthplace of the movement for Environmental Justice in Chicago, a response to government and corporate policy and the toxicity of the land and the water. The study area also comprises travel routes from the Underground Railroad and the Great Migration. Numerous figures from the Civil Rights movement worked in the area, including Bishop Ford, for whom the section of I-94 that passes just east of Beaubien Woods, is named.

Community groups include biking groups, and regional bike trails, like the Cal-Sag Trail and the Major Taylor Trail, cross the project area. The Little Calumet River is part of the Northeastern Illinois Regional Water Trail system for canoeing and kayaking, and recent work has resulted in the establishment of an African American Heritage Water Trail on the Little Calumet River beginning at Beaubien Woods and stretching westward to Robbins. There is community interest in establishing open spaces in vacant residential and farmed land along the Little Calumet River, particularly on the north bank between Beaubien Woods and Indiana Avenue. Currently there is almost no public access to the riverfront from the neighborhoods here and trails connecting communities to public open space along the river are an integral part of the CAP.

# **CONSERVATION THREATS**

# FRAGMENTATION AND HABITAT DESTRUCTION

Roads, railroads, altered hydrology, and toxicity have divided and degraded the project area's habitat. Disturbances have resulted in poor soil, fluctuating water levels, and contaminated sediments that make it difficult to support historic community types.

#### INVASIVE SPECIES

Invasive plant species are present throughout the project area, including purple loosestrife (*Lythrum salicaria*), common reed (*Phragmites australis*), and common buckthorn (*Rhamnus cathartica*). It is a challenge to maintain restoration in a landscape dominated by invasives that can quickly recolonize areas planted with native species if maintenance is not consistently undertaken.

#### POLLUTION/TOXICITY

Pollutants from industry, illegal dumping, contaminants in wastewater, and leakage from landfills all affect the project area. Sediments in the river and in soils may contain industrial chemicals, pesticides, polychlorinated biphenyls (PCBs), petroleum by-products, and heavy metals.

#### **BROWNFIELD OWNERSHIP CHALLENGES**

Riverfront brownfield parcels do not always fit into land acquisition goals of the Forest Preserves of Cook County, the Chicago Park District, and NeighborSpace. As a result, parcels remain contaminated and unused for habitat or community access. The question of who will own and/or remediate brownfield parcels along the Little Calumet River needs to be addressed.

#### PUBLIC ACCESIBILITY

There is very limited public access to the Little Calumet River in the project area. In most cases the river is not even visible. This makes it difficult to build a constituency for advocacy and maintenance and results in lack of equity in terms of access to the significant ecological and cultural heritage of the Little Calumet.

#### MAINTENANCE AND RESTORATION

There is a need for a mechanism to maintain open spaces and restored areas. Many landowners of natural areas rely on community or stewardship groups to maintain restoration and open space. Funding for on-going maintenance is limited. Large-scale restoration in the project area will require a solution to this issue of maintenance.

#### **UNINVITING SPACES**

A perception that areas along the river are remote and isolated interferes with communities connecting to riverfront spaces. Community members within the project area have stressed the need for safety, lighting, and call boxes. Riverfront open space needs to be inviting.

#### **CLIMATE CHANGE**

More intense and frequent precipitation will result in more flooding, runoff, and erosion, as well as combined sewer overflows which result in untreated stormwater and sewage entering the river. Warmer water temperatures can also lead to lower dissolved oxygen in the river, making the river inhospitable to species that need higher levels of oxygen.

# **CONSERVATION OPPORTUNITIES**

#### **GREENING THE RIVERFRONT**

Plant milkweed and other pollinator-friendly flowering plants as a strategy to improve ecological health across the entire project area. Sites that are too degraded to support native ecosystems, such as prairie, wetland, savanna, and woodlands, can support native flowering plants. This improves stormwater infiltration and enhances habitat, including for pollinators like monarchs.

#### CREATE WELCOMING SPACES AND TRAILS

Open spaces and trails, including park land, gardens, bicycling centers, and interpretive spaces, can be created in conjunction with community planning processes and community leaders so that the open spaces enhance the vision of local communities for river access, health, resiliency, and equity, while also meeting ecological conservation targets.

#### **ELEVATE SIGNIFICANT HISTORY**

The recently launched African American Heritage Water Trail on the Little Calumet River highlights the Underground Railroad, the birthplace of Environmental Justice in Chicago, the Civil Rights movement, and activities and activism of the community. Opportunities to showcase local history and connect it to the work of community groups will bring positive attention to, and investment in, the area.

# CONNECT NEIGHBORHOODS TO REGIONAL TRAILS

Undeveloped and partially developed CDOT rights-ofway, running parallel to the river or dead ending at the river, could be developed into walking and bicycling paths to connect neighborhoods to the regional Cal-Sag and Major Taylor Trails.

# WORK WITH COMPANIES TO ACHIEVE A CONTINUOUS GREEN RIVERFRONT

Industrial areas and landfills comprise some of the largest priority sites. Pollinator-friendly native flowering plantings on these sites is essential to meeting the goal of coordinated restoration in the project area. Involving employees in restoration work and maintenance would be extremely valuable, and signage and social media could be used to bring positive attention to this work.

#### TAP NATIVE CALUMET PLANT SOURCES

Organize a community-based effort to identify and map sites that have a ready supply of native seed plants that survive and thrive in the Calumet. Tap into existing volunteer groups to expand their efforts into seed collecting, processing, and distribution.

# EVALUATE LAND TRUST FEASIBILITY FOR BROWNFIELD OWNERSHIP

Form a coalition to evaluate the feasibility of creating a land trust to own and remediate contaminated land in Calumet, or to evaluate the feasibility of expanding the mission of an existing open space-owning entity to include the acquisition of brownfields.

#### **DEVELOP MAINTENANCE MECHANISM**

Create a coalition to address the development, funding, and availability of maintenance crews to help maintain restored areas. Tap into the experience and availability of groups already doing this work, such as the Forest Preserves, Friends of the Forest Preserves, Student Conservation Association, and others. Provide employment and training to local community members.

# IMPROVE AREAS CONSIDERED UNSIGHTLY AND UNINVITING

Clean-up efforts, strategic lighting, and trail docents make riverfront spaces more inviting. Removing debris from fly dumping, fixing potholes on partially developed right-of-ways, and thinning heavy plant growth that obstructs views also makes sites appealing. Local churches and school groups can adopt sites for clean-up or restoration.

# **CONSERVATION TARGETS AND STRATEGIES**

Conservation targets for the priority sites include supporting native ecosystems such as woodland, savanna, wetland, and prairie, as well as planting of pollinator-friendly native flowering plants like milkweeds and asters. Conservation targets also include animals, some of which are declining species still present in the project area, like the monarch butterfly and shrubland birds. The monarch, an endangered species and a pollinator, will directly benefit from native ecosystem restoration and planting of pollinator-friendly native flowering plants. Shrubland birds, such as white eyed and Bell's vireos, would benefit from actions like planting native shrubs interspersed with grasses along right-of-way corridors, for example, the ComEd right-of-way that traverses the project area, and/or along bicycle trails like the Cal-Sag and Major Taylor trails.

Other species are also included as conservation targets, some of which are already a focus of conservation attention or efforts within the project area, for example bats, fish, and osprey. Bat acoustic monitoring takes place at Joe Louis Golf Course and a bat house has been installed at Whistler Woods; osprey nesting poles have been installed at Whistler Woods and Beaubien Woods, and crevice habitat for fish has been created in the banks of the river in parts of the study area. This CAP seeks to build upon these efforts by designating these species as targets for conservation throughout the project area.

Fish and macroinvertebrates, including the threatened banded killifish, will benefit from cleaner and more oxygenated water, more crevice habitat within the river banks, native vegetation that overhangs the water, and establishment of water plants in backwater areas. Bats would benefit from simple actions such as planting of native flowering pollinator-friendly vegetation with yellow or white flowers that can be seen in low light. A host of other targets in need of more habitat in the project area include grassland and marsh-breeding birds, as well as reptiles and amphibians. Habitat for many of these could be enhanced during restoration of wetlands, ponds, and river banks.

Targets designed to connect communities to natural areas and the river are also priorities. These include targets for stewardship, and creation of riverfront open space connected to adjacent neighborhoods, as well as recreational opportunities, including biking, hiking, and water trails.

Ecosystems and natural communities are heavily influenced and sometimes determined by soil type and quality. Many of the sites in this CAP need soil remediation before historic communities can be established. The establishment of pollinator-friendly native flowering plants, however, is attainable at all sites and contributes to stormwater infiltration, presence of wildlife and insect populations, and quality of life for communities who visit or work in the project area.

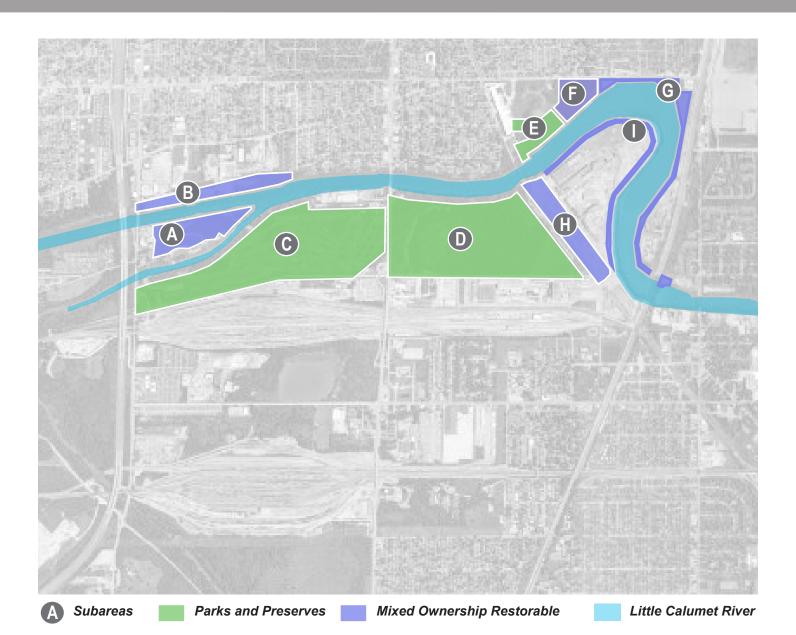
All targets comprise suggestions that landowners and managers can consider and prioritize according to their goals for their site. The targets, and strategies to achieve those targets, are presented at right. The site sheets that describe each priority site include icons that identify suggested conservation targets for each site.



A monarch caterpillar on swamp milkweed. Planting of milkweeds enhances habitat for this endangered and declining species.

CONSERVATION TARGETS				
Pollinator-friendly Native Plants	Plant pollinator-friendly native plants, including milkweeds, goldenrods, and asters, among others; remove invasive woody and/or herbaceous vegetation	Birds	Install osprey poles; restore marsh vegetation; create open shrubland; mow only once per year and overseed with native flowering plants	
Woodland and Savanna	Remove invasive woody vegetation; thin woody vegetation; utilize prescribed burns; overseed with woodland/ savanna mixes	Reptiles	Remove invasive shrubs and trees; maintain connectivity between wetlands; maintain cover; create emergent vegetation in ponds; use root balls to stabilize banks	
Wet/Sedge Meadow and Prairie	Remove invasive woody vegetation; remove invasive herbaceous/wetland vegetation; thin woody vegetation; utilize prescribed burns; overseed with prairie or wetland mixes/install wetland plugs	Amphibians	Restore wetlands and river areas with shoreline and emergent vegetation and rocks and logs, including some open areas on shore; maintain connections between wetlands including temporary ones	
Monarchs	Restore native ecosystems and plant pollinator-friendly species, such as milkweeds, across the entire project area	Trails	Create, connect, and maintain trails to and along the river to give communities access to open spaces and natural areas	
Fish and Macroinvertebrates	Install rock and boulder habitat within the river itself; plant overhanging vegetation at the shoreline; create crevice habitat in the banks; establish water plants in sheltered areas	Community Open Space	Work with communities to define locations and uses of open space and strategies for acquisition, restoration, development, and maintenance	
Bats	Plant native species with yellow or white flowers (visible in low light) and evening-blooming native flowers; retain snags; install bat houses; improve habitat for macroinvertebrates.	Stewardship	Work with industries, landfills, and communities to form groups who will steward and maintain natural areas	

# **LOCATION MAP AND PRIORITY AREAS**



#### SUBAREA SELECTION

Sites with letters indicate geographic subareas that are designated as Parks and Preserves and Mixed Ownership Restoreable sites. These subareas do not conform to individual parcels. Subarea site parcels can be seen by using the interactive map linked in the Additional Resources section of this CAP. The pages immediately following this page feature site-by-site descriptions of site characteristics and observations along with identified site conservation strategies. Note: Map not to Scale.

#### PARKS AND PRESERVES

These are owned and/or managed by the FPCC or the Chicago Park District. Restoration of wetland, savanna, woodland, and prairie habitats is ongoing at several of these sites.

#### MIXED OWNERSHIP RESTORABLE

These are a mix of industrial, landfill, residential, vacant residential, other vacant open space, utility right-of-ways, and land owned by the Water Reclamation District. Some have degraded habitat such as savanna that could be restored and all could support plantings of native flowering plants.



- A Fay's Point Marina
- Ozinga & Water
   Reclamation District
- **G** Joe Louis Golf Course
- Whistler Woods
- Mittal Woods
- ( Airgas
- G SEPA #2 & Right-of-Ways

- (f) Cleveland-Cliffs Open Space
- Cleveland-Cliffs Shoreline
- **OmEd Right-of-Ways**Not shown, see subarea map
- Community Riverfront Connections
- Georgia-Pacific & Innophos
- M Altgeld Gardens Wetlands

- N Beaubien Woods
- O Land and Lakes Landfill
  Consists of two separate areas
- Bishop Ford Vacant
- Ashland Chemical
- R Dolton Prairie
- S Waste Management
- **1** Park #576

# SUBAREA A FAY'S POINT MARINA SITE TYPE: Mixed Ownership Restorable

#### SUBAREA MAP





#### SUBAREA DESCRIPTION

#### Location

1518 Broadway Street, Blue Island, IL 60406

#### **Ownership Status**

Mix of Water Reclamation District, South Suburban Land Bank, and privately owned parcels.

#### **Land Uses**

Vacant, Right-of-Way

#### **Dimensions**

Total Area: 25 acres
River Frontage: 4,000 feet

#### **Historic Habitat**

Predominately forest, prairie at the northwest corner.

#### **Current Habitat**

The site is open, grassy, and partly wooded near the east end, with townhouses, senior housing, paved walkways, and a marina. Fill at the site includes biological sludge. The Cal-Sag Trail runs across the northern edge of the site along the river, on land owned by the Water Reclamation District. The Cal-Sag Trail connects this site to the Joe Louis Golf course on the east, via a pedestrian bridge. Joe Louis Golf Course is another priority site, with degraded woodland including oaks. Oaks are also present directly across the Little Calumet River at the Little Calumet Boat Launch Preserve at the west end of Joe Louis.

Restoration was done at Fay's Point during its development for housing, which won Friends of the Chicago River's Blue Ribbon Award in 2010. The bank along the Little Calumet River was restored, which included the removal of a concrete wall along the bank and wetland restoration. Prairie restoration took place in upland areas. A bird-watching platform and mulch trails were installed, as was a boardwalk and a public access canoe launch. Boardwalks provide cover and shading for fish and amphibians. Rain barrels, detention ponds, permeable paving, and level spreaders were used to infiltrate stormwater, improving water quality. Landscaping with native plants has taken place near the buildings. Maintenance has included burning.







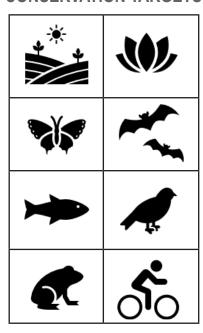
Restored bank and dock.

#### **CONSERVATION STRATEGIES**

Conservation targets include on-going maintenance of the Cal-Sag Trail and restored natural areas, including wetland and prairie, and the restored river banks along the Little Calumet River. Strategies include removal of invasive woody vegetation and invasive herbaceous/wetland vegetation, prescribed burns, overseeding with wetland and prairie mixes, and installation of wetland plugs.

In addition, maintenance of the native landscaping near the buildings could include maintenance or introduction of pollinator-friendly plants such as milkweeds that will support monarch populations. Habitat for bats could also be supported by maintenance or introduction of landscaping with evening flowering plants like evening primrose, and/or native plants with white or yellow flowers that will attract insects such as moths in low light when bats are feeding. Explore options for installing and maintaining overhanging vegetation along the restored bank and installing and maintaining emergent water plants between the restored bank and the docks, or just south of the docks. These would enhance habitat for fish and macroinvertebrates.

Placement and maintenance of rocks, downed limbs, and native shrubs adjacent to the Little Calumet River would support terrestrial snakes and the northern water snake by providing cover and basking sites, and widely spaced vegetation could provide resting areas for frogs, including bullfrogs and green frogs. Enhance habitat for declining shrub birds along the Cal-Sag Trail corridor through planting and maintenance of native shrubs interspersed with native herbaceous plants such as milkweeds.



#### **SUBAREA B**

# **OZINGA & WATER RECLAMATION DISTRICT**

# SITE TYPE: Mixed Ownership Restorable

#### SUBAREA MAP



# KEY MAP LEGEND Subarea Boundary Bulkhead Natural Slope Parcel Boundaries Publicly Owned Wetlands CSO Outfalls

#### SUBAREA DESCRIPTION

#### Location

13100 S. Ashland Avenue, Calumet Park, IL 60827

#### **Ownership Status**

Metropolitan Water Reclamation District

#### **Land Uses**

Vacant, Right-of-Way

#### **Dimensions**

Total Area: 25 acres

River Frontage: 2,800 feet

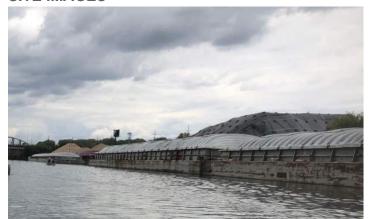
#### **Historic Habitat:**

Predominately forest/oak savanna, prairie at west end.

#### **Current Habitat**

Roughly half of the site is wooded, with a little bit of grassy shrub, and the rest of the site is open without vegetation. The site hosts a concrete operation, with piles of gravel, stone, and sand throughout the open area. Barges carry the cement, sand, and stone to and from the site. The eastern half of the site is wooded and the eastern edge had oaks in 1939 and is designated as a Chicago Wilderness oak hub area, which continues east from the site into a residential area. However, no oaks are present today either within the site or in the residential area. The east

end of this priority site is also immediately across the Little Calumet River from the wooded part of Joe Louis Golf Course, which does currently have oaks. Because of the immediate connection of this site with residential areas, it is unclear if the wooded area could be maintained through burning if restoration were to take place. However, there may be (or could be) access for stewardship.





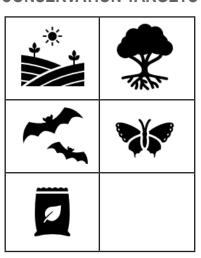


The unassociated woody growth on the eastern part of the site.

#### **CONSERVATION STRATEGIES**

Conservation targets include woodland/savanna restoration in the wooded, eastern half of the site. This could include removal of invasive woody and herbaceous vegetation, thinning of woody vegetation, overseeding with woodland/savanna seed mixes and prescribed burns. If open areas of the site are available for restoration, planting of pollinator-friendly native flowering plants would provide habitat for monarchs.

Bat habitat could also be enhanced if evening-blooming plants, like evening primrose, and/or native plants with white or yellow flowers were installed. These plantings could be flower bed installations or planting in areas of the woodland/savanna where the canopy is thin and ample light is available for herbaceous plants. Options for developing stewards for woodland/savanna restoration and native pollinator-friendly plantings could be explored with Ozinga employees and with the neighborhoods immediately east of this site.



#### **SUBAREA C**

# JOE LOUIS GOLF COURSE

SITE TYPE: Parks and Preserves

#### SUBAREA MAP





#### SUBAREA DESCRIPTION

#### Location

13100 S. Halsted Street, Riverdale, IL 60827

#### **Ownership Status**

Forest Preserves of Cook County

#### **Land Uses**

Forest Preserve, Golf Course

#### **Dimensions**

Total Area: 127 acres River Frontage: 3,800 feet

#### **Historic Habitat**

Mostly wooded/oak savanna, with trees along the riverbank. Some prairie and wetland present.

#### **Current Habitat**

This is an Audubon-certified golf course with oaks and other woody vegetation on the north edge along the Little Calumet River and a few small densely wooded spots within the course itself. There are hedge rows on the course to provide screening, a few small ponds with once-yearly mowed buffers, areas for plantings at the entrance and clubhouse, and a few patches on the course managed by goat grazing or once-a-year mowing. The Cal-Sag Trail runs along the river and through the woody area on the north edge of the course. The wooded areas consist of oaks and invasive species such as buckthorn, honeysuckle and tree of heaven, although some native ephemerals are present, including

goldenrod and asters. The goat-grazed areas are weedy with burdock, pokeberry foxtails, and thistle. Light herbiciding is used on the thistle. Joe Louis Golf Course connects to Fay's Point to the west via the Cal-Sag Trail over the Little Calumet River and is across Halsted Street from Whistler Woods on the east. Acoustic bat monitoring here has revealed six species, and Whistler Woods to the west has a bat house.

Restoration work at this site could create a pilot for developing more rigorous certification standards for forest preserve golf courses.



Pollinator-friendly native flowering plants could be installed in beds near the golf course entrance.



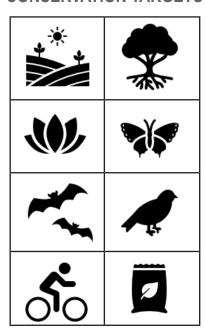
The Cal-Sag Trail winding through the woods at the north edge of the Golf Course.

#### **CONSERVATION STRATEGIES**

Conservation targets are woodland/savanna restoration in the wooded, northern part of the site, and in the wooded inclusions on the golf course itself. This could include removal of invasive woody and herbaceous vegetation, thinning of woody vegetation, overseeding with woodland/savanna seed mixes and prescribed burns. Cutting and herbiciding invasive shrubs, like buckthorn and honeysuckle, at the edges of the woody areas would allow more room and light for woodland ephemerals and create an opportunity for planting native shrubs to provide bird habitat. Volunteers or paid community members to assist with this restoration and maintenance would be needed and funding would be necessary.

Pollinator-friendly species, such as milk weeds, goldenrod, and evening primrose, planted in the beds near the entrance, parking lot, and at the clubhouse would provide habitat for monarchs and enhance bat habitat. Goldenrods could be a good option since the area supports populations of rarer showy and old field goldenrods. Educational signage and social media outreach could accompany the plantings. Planting and maintenance of pollinator-friendly native plants in the areas currently goat-grazed or mowed once a year would also benefit pollinators and bats. The hedge screens could be replaced with native shrubs. Strategies for pond buffers include removal of invasive herbaceous/wetland vegetation and seeding with native flowering plant or wetland mixes and/or installing wetland plugs.

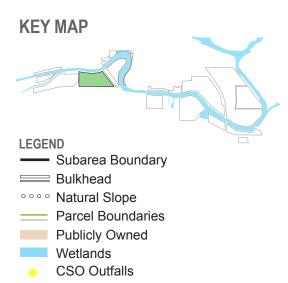
The potential to enhance habitat for shrub birds along the Cal-Sag Trail corridor through planting and maintenance of native shrubs could also be explored. Finally, opportunities to replace the current parking area with permeable paving would help improve water quality.



# SUBAREA D WHISTLER WOODS SITE TYPE: Parks and Preserves

#### SUBAREA MAP





#### SUBAREA DESCRIPTION

#### Location

735 W. 134th Street Riverdale, IL 60827

#### **Ownership Status**

Forest Preserves of Cook County

#### **Land Uses**

Forest Preserve, Public Recreation, Right-of-Way

#### **Dimensions**

Total Area: 137 acres River Frontage: 2,850 feet

#### **Historic Habitat**

Mostly prairie with wet prairie and marshy areas around the periphery. Forest/oak savanna along the river and a small portion of forest along the southern boundary. Oak along the Little Calumet River.

#### **Current Habitat**

The site is mostly wooded, with bur oaks, other native trees, and woody invasives including buckthorn, boxelder, and cottonwood. There is a large freshwater forested/shrub wetland along the Little Calumet River at the site's north edge. A smaller forested/shrub wetland occurs in the northeast section of the preserve. Native herbaceous species at the site are common to mesic woodlands and savannas, including downy yellow violet, prairie trillium, allium (*Allium tricocceum*), woodreed, Canadian clearweed, and snakeroot. Invasive species are common at degraded mesic and

upland sites including curly dock, Queen Anne's lace, and broad leaved helleborine.

FPCC categorizes the habitat that runs parallel to the river as savanna. The site's center is unassociated woody, with a triangle of prairie at the southeast corner. An osprey pole and bat house have been installed in this prairie area. Other notable species at Whistler Woods include wild bergamot, several species of milkweed, and dark green bulrush, a native wetland species. Most of the site has been filled with dredge spoil, although the wetland/savanna along the river has not.

An unused FPCC-owned road runs along the eastern edge, where Whistler Woods connects with Cleveland-Cliff's steel mill. The Cal-Sag Trail and Major Taylor Trail run through Whistler Woods. The Major Taylor Trail crosses the Little Calumet River here and a community mural commemorating Major Taylor has been painted on this bridge.



Major Taylor bridge over the Little Calumet River with a mural commemorating the life of world champion, Marshall (Major) Taylor.



The road separating Whistler Woods from Cleveland-Cliffs.

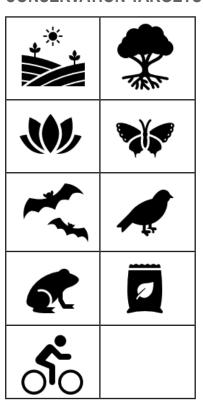
#### **CONSERVATION STRATEGIES**

Oak savanna and woodland restoration are targets for Whistler Woods, as is restoration and maintenance of pollinator-friendly flowering plants such as milkweed and wild bergamot. Restoration of wetlands is also a target. Restoring these community types will support multiple niches and transitions between wetlands, savannas, and woodlands.

Continued removal of invasive species by FPCC would be very beneficial. FPCC has identified a need for graminoid seeding in shady areas where invasive species have been removed. Establishing a stable population of native graminoids, and forbs in the understory would provide a fuel source for prescribed burns. These burns are absolutely necessary for oak savanna ecosystems. Selective canopy thinning would improve conditions for overseeding of graminoids and forbs and improve oak regeneration. Further overseeding of targeted woodland and prairie mixes to augment savanna restoration would provide more pollinator-friendly areas, drawing monarchs and other pollinators to the site, and also enhancing the habitat for bats.

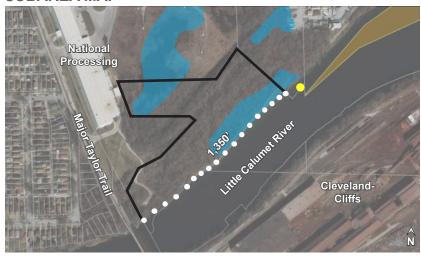
Finally, seeding of wetland mixes or installation of wetland plugs would improve the quality of the wetlands. Restoration of emergent and shoreline wetland vegetation and maintaining connections between wetlands has the potential to benefit American toads and western chorus frogs. There may be potential to develop the unused road along the eastern edge of Whistler into an interpretive trail or bike connection. Maintenance and enhancement of the Major Taylor Trail and restoration by friends and

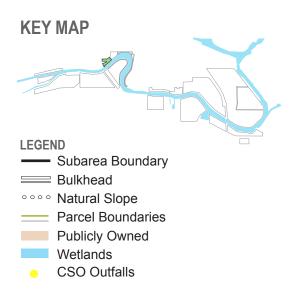
volunteer groups is also a priority at this site.



# SUBAREA E MITTAL WOODS SITE TYPE: Parks and Preserves

#### SUBAREA MAP





#### SUBAREA DESCRIPTION

#### Location

813 E. 130th Place, Riverdale, IL 60827

#### **Ownership Status**

Chicago Park District

#### **Land Uses**

Open Space, Vacant

#### **Dimensions**

Total Area: 13 acres

River Frontage: 1,350 feet

#### **Historic Habitat**

Forest/oak savanna

#### **Current Habitat**

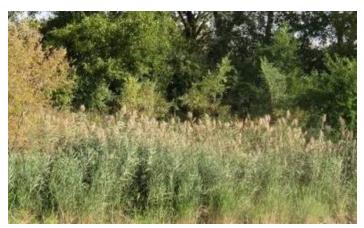
Mittal Woods is a recently protected parcel of land, transferred from ArcelorMittal to the Chicago Park District in early 2018. This site is almost entirely wooded, and the east end is identified as a remnant oak area and as a Chicago Wilderness oak hub. Although there are no oaks present at Mittal Woods currently, Mittal Woods connects to the priority industrial site, Airgas, to the east where there are oaks. Mittal Woods also appears to share forested shrub wetlands with Airgas, with one large wetland from the National Wetlands Inventory spanning both sites.

Mittal Woods is entirely within the Illinois Department of Natural Resources historic oak area. There are currently a variety of wetlands at Mittal Woods, appearing on the National Wetlands Inventory as emergent and forested/shrub wetlands. There are also two small ephemeral ponds. Onsite fill includes ash and cinders as well as construction debris. Additional testing is needed to determine if remediation is necessary.

Restoration work at this site is taking place, with Student Conservation Association Crews engaged in clearing invasive Phragmites in addition to removal of invasive tree species, burning, and other restoration work. Mittal Woods has a natural shoreline, although scattered debris is embedded throughout, and is in proximity to SEPA#2 which oxygenates the water. It may be a good site to consider for shoreline rocky and crevice habitat for macroinvertebrates and fish as well as overhanging vegetation to cool the water. Currently restoration work along the shore is complicated as removal of invasive buckthorn can lead to erosion.



Open banks with a southern exposure can provide nesting habitat for aquatic turtles. Image courtesy of: Wikipedia Creative Commons



Wetland restoration at Mittal Woods includes removal and control of the invasive wetland plant *Phragmites*.

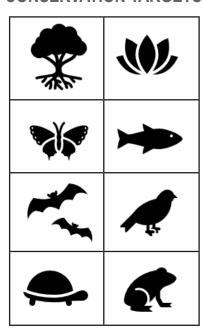
#### **CONSERVATION STRATEGIES**

Restoration of oak savanna and wetlands are both targets. These targets would enhance the goals that the Chicago Park District has for creating and maintaining habitat for migrating and breeding birds and wildlife.

Clearing of invasive woody species, such as ash, maple, and elms would increase the amount of light reaching the understory. This is a long term goal of the Chicago Park District and is important for both wetland and savanna ecosystems. Opening the canopy would also make it easier for migrating and breeding birds to identify the site as potential habitat, since many species rely on wetlands. Following clearing work, overseeding of wetland mixes and oak savanna fuel matrices would help establish native understory vegetation. Buildup of this vegetation allows for prescribed burns. Aggressive management and control of herbaceous invasives through mechanical, chemical, and biological methods is necessary to help native species become established. Establishment or maintenance of pollinator-friendly native species in the understory would benefit monarchs and bat species.

The restoration of wetlands has the potential to benefit frogs. If this site needs bank stabilization after removal of invasive woody vegetation, shoreline stabilization with methods such as rootballs or fiber rolls could be considered. Planting of overhanging vegetation along the river would improve habitat for macroinvertebrates and fish, and installation of root balls or other habitat structures in the bank during stabilization would improve habitat for fish and northern watersnakes. Open natural banks could also provide nesting habitat for aquatic turtles.

Public access to the river at Mittal Woods is another long term goal of the Chicago Park District.



# SUBAREA F AIRGAS

# SITE TYPE: Mixed Ownership Restorable

#### SUBAREA MAP



# KEY MAP LEGEND Subarea Boundary Bulkhead Natural Slope Parcel Boundaries Publicly Owned Wetlands CSO Outfalls

#### SUBAREA DESCRIPTION

#### Location

12722 S. Wentworth Avenue, Chicago, IL 60628

#### **Ownership Status**

Airgas Specialty Gasses

#### **Land Uses**

Industrial, Commercial

#### **Dimensions**

Total Area: 19 acres

River Frontage: 1,050 feet

#### **Historic Habitat**

Predominantly forest/oak savanna with some prairie in the northwest corner of the site; national wetlands inventory shows forested shrub wetlands and an emergent wetland on the site.

#### **Current Habitat**

This site includes degraded oak savanna. It is largely wooded, with some open vegetated areas and manicured grass around the parking lot with buildings in the central part of the site. There may also be degraded wetlands on the site, as indicated by the National Wetlands Inventory.

This site could be pivotal for a larger restored area because it shares oak savanna with SEPA#2 on the east, and wetlands with Mittal Woods on the west. Pollinator- friendly plants could be planted in open grassy areas and potentially in beds around the

buildings and parking lots. With signage and employee stewardship, this could help connect communities to ecological heritage.



View of Airgas from the water showing buildings and degraded savanna.



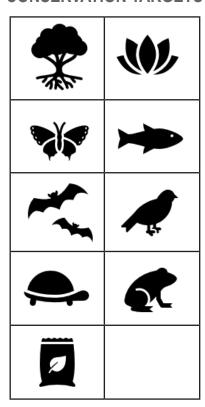
Open areas at Airgas could be planted with pollinator-friendly native flowering plants.

#### **CONSERVATION STRATEGIES**

Conservation targets are oak woodland/savanna restoration in the wooded part of the site. This could include removal of invasive woody and herbaceous vegetation, thinning of woody vegetation, overseeding with woodland/savanna seed mixes and prescribed burns. Pollinator-friendly species, such as milkweeds, goldenrod, and evening primrose, planted in beds where turf grass currently exists around the parking lot, and in other open vegetated areas, would benefit monarchs and bats. Exploring the potential to restore degraded wetlands that may still exist on the western part of the site is also a target. This could include removal of invasive woody vegetation, removal of invasive herbaceous/wetland vegetation, and seeding of wetland mixes or installation of wetland plugs. Re-establishing or maintaining connections between wetlands on the Airgas property that connect to wetlands at Mittal Woods has the potential to benefit target amphibian species.

Exploring the feasibility of removing invasive woody vegetation and installing native overhanging vegetation at the river bank is also a target. This would provide shade and cooling to the river, and benefit fish and macroinvertebrates. Wetland vegetation or plugs along the riverbank could increase potential nesting habitat for breeding and migrating birds, and open areas along the bank could provide turtle nesting, frog resting, and snake basking habitat. Enhanced fish and macroinvertebrate populations could benefit waterfowl that take advantage of the warm outfall immediately across the river at the Cleveland-Cliffs shoreline by improving their food sources.

Airgas is a site where exploration of the potential for employees to participate in restoration and maintenance of restored areas is a target.



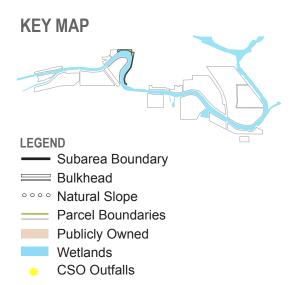
#### **SUBAREA G**

# SEPA #2 & RIGHT-OF-WAYS

# SITE TYPE: Mixed Ownership Restorable

#### SUBAREA MAP





#### SUBAREA DESCRIPTION

#### Location

127th and S. State Street

#### **Ownership Status**

Public: Metropolitan Water Reclamation District, Metra,

Utility ROWs

#### Land Uses

Industrial, Commercial

#### **Dimensions**

Total Area: 25 acres

River Frontage: 5,500 feet

#### **Historic Habitat**

Forest/ oak savanna.

#### **Current Habitat**

The western edge of SEPA #2 is presently a degraded oak savanna. The oaks include swamp white oaks and Chinquapin oaks. There are also both woody and herbaceous invasive species at the site. These include buckthorn, honeysuckle, purple loosestrife, catnip and native trees that often act invasively in urban-adjacent natural areas, such as ash and maple. This SEPA station also comprises grassy areas, where pollinator-friendly species could be planted. The streamside elevated pool aeration here pumps water from the river into an elevated pool where it then flows over a series of waterfalls back into the river, oxygenating the water. Bank crevices for catfish already exist in

this area. Acme Bend, on which the SEPA station is situated, is known as a birding hotspot, with at least 25 different species of waterfowl having been seen in the area.

The SEPA station itself is accessible to the public. On the eastern end, the SEPA station gives way to Water Reclamation District, ComEd, and Illinois Central Railroad right-of-ways along the river. The shore along these right-of-ways is predominately lined with woody vegetation.



Oak in the degraded savanna on the western edge of the site.



Adding rocky habitat to the outfall at the river could enhance habitat for fish and macroinvertebrates.

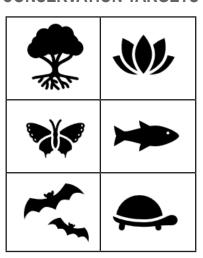
#### **CONSERVATION STRATEGIES**

Protection and restoration of the oak savanna is a conservation target. Clearing the non-oak tree canopy would remove competition, reduce crowding, and increase sunlight, making oak regeneration more likely. Mechanical, chemical, and potentially biological (in the case of purple loosestrife) control of the many invasive woody and herbaceous species at the site would also increase sunlight penetration, freeing up space for native shrubs, forbs, and graminoids. Following clearing and control, overseeding of a savanna seed matrix would improve native character and allow for build up of fuel, with the eventual goal of prescribed burns.

Pollinator-friendly species, such as milkweeds, goldenrod, and evening primrose, could be planted in open areas, after removal of invasive woody, and/or herbaceous vegetation. This would benefit monarchs and bats.

Additional aquatic habitat could be created at the SEPA outfall itself. For example, installing rock and boulder habitat within the river here would create crevices for macroinvertebrate diversity, also benefiting fish, birds, and bats. Restoring and improving the habitat along the entire mile stretch of natural riverbank present at SEPA#2 and the right-of-ways to the east would support several animal targets. Thinning of woody vegetation along the bank, installation of overhanging vegetation and wetland plugs, stabilization of the bank with root balls or other bioengineering techniques such as fiber rolls, would improve habitat for fish, macroinvertebrates, breeding and migrating birds, and northern watersnakes. It would also potentially provide nesting habitat for turtles.

In order for the Water Reclamation District-owned portions of this site to be restored, an entity prepared to undertake and maintain the restoration would need to lease the land.



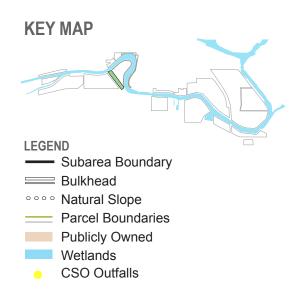
#### **SUBAREA H**

# CLEVELAND-CLIFFS OPEN SPACE

# SITE TYPE: Mixed Ownership Restorable

#### SUBAREA MAP





#### SUBAREA DESCRIPTION

#### Location

13500 S Perry Avenue, Riverdale, IL 60827

#### **Ownership Status**

Private: Cleveland-Cliffs

#### **Land Uses**

Industrial, Commercial

#### **Dimensions**

Total Area: 20 acres

River Frontage: 7,000 feet

#### **Historic Habitat**

Predominately prairie/wet prairie/marsh, with a sliver of forest at the north end.

#### **Current Habitat**

Connects with Whistler Woods through an unused road running between the two that belongs to the Forest Preserves.

This site comprises open space adjacent to the border of the Cleveland-Cliffs plant and Whistler Woods. It is an area of mostly exposed ground with gravel and rocky areas, as well as some swaths where unassociated herbaceous plants are growing. There are several rail lines running through the site and there are various containers on site. There is a linear strip of unassociated grassy vegetation running between the two major aggregates of rail lines. This site connects with the Cleveland-Cliffs shoreline,

another priority area immediately north and east, and Whistler Woods to the west. In Whistler, about 300 feet from this site is a bat house and an osprey pole and planting of native species would help create a landscape better able to support these species. This entire site contains fill, including dredging spoil, municipal solid waste, and steel industry waste.



View of the open space at Cliffland Cliffs.

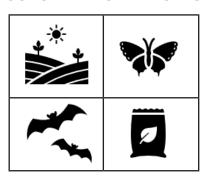


Creating planting beds with pollinator friendly flowering natives would help to ecologically connect this space with Whistler Woods.

#### **CONSERVATION STRATEGIES**

Targets for this site include planting of pollinator-friendly native flowering plants and developing stewards, perhaps among Cleveland-Cliffs employees, to maintain them. Pollinator-friendly species, such as milkweeds, goldenrod, and evening primrose, planted in beds, or perhaps in areas that are supporting vegetative growth currently, such as the area between the two major aggregates of rail lines, would provide habitat for monarchs and enhance bat habitat.

Strategies could include removal of invasive species and overseeding with pollinator species, or installing plugs. The presence of these plantings will help to ecologically connect the Cleveland-Cliffs plant with Whistler Woods. It would also help to ecologically connect this western edge of the mill with the prairie plantings done in 2014 at the parking lot, when the site was owned by ArcelorMittal. For more information about this project see the Additional Resources section of this CAP. The addition of a habitat patch here would help pollinators find closely spaced habitat to facilitate their movement through the landscape.

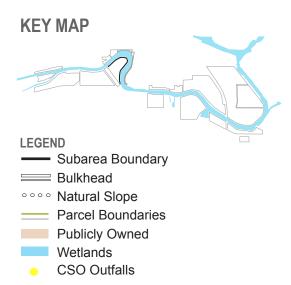


#### **SUBAREA I**

# CLEVELAND-CLIFFS SHORELINE SITE TYPE: Mixed Ownership Restorable

#### SUBAREA MAP





#### SUBAREA DESCRIPTION

#### Location

13500 S. Perry Avenue, Riverdale, IL

#### **Ownership Status**

Private: Cleveland-Cliffs

#### **Land Uses**

Industrial, Commercial

#### **Dimensions**

Total Area: 18 acres

River Frontage: 7,000 feet

#### **Historic Habitat**

Forest at the northernmost part of the bend with forest continuing to the west; prairie/wet prairie/marsh along the south sloping bank east of the bend.

#### **Current Habitat**

The bank is overwhelmingly natural, with very little bulkhead. It is steep, with invasive woody vegetation. There are at least three discharges of runoff water and water used for cooling. The warm outfall (just west of the northernmost tip of the bend) enhances habitat for waterfowl, because it adds warm water to the Little Calumet River all year long.

The Cleveland-Cliffs shoreline connects with the Whistler Woods shoreline to the west. Whistler woods has oak/wetland habitat along its shore and restoration work on Cleveland-Cliff's bank

would enhance Whistler's habitat, and benefit any osprey and bats occupying the nesting pole or bat house at Whistler.

The former owner of Cleveland-Cliffs, ArcelorMittal, worked with the Wildlife Habitat Council and the Field Museum to install prairie plantings by their parking lot in 2014. Enhancing the shoreline would also benefit pollinator species that visit this prairie patch by creating more continuous habitat.





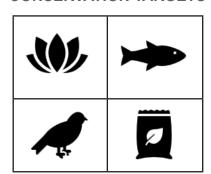


Addition of overhanging native vegetation to the shoreline would improve habitat.

#### **CONSERVATION STRATEGIES**

Improving bank habitat for fish and macroinvertebrates is a target at this site. Strategies include clearing invasive woody and herbaceous vegetation along the shore and adding overhanging native vegetation and perhaps also wetland plugs. Overhanging vegetation will help cool the water, creating temperature gradients and helping to increase dissolved oxygen levels which will be important as the climate warms. Wetland plugs along the riverbank could increase potential nesting habitat for breeding and migrating birds.

If the bank needs stabilization after removal of invasive vegetation, introduction of root balls, which offer crevice habitat for fish as well as potential basking surfaces for reptiles, and/or fiber rolls which can help native vegetation become established, should be considered. Creation of habitat crevices along the bank, such as those created by Friends of the Chicago River in other places along Acme Bend, could bolster fish populations. Since the SEPA#2 station is directly across the river and adds oxygen to the river, this is a good place to bolster aquatic life. Exploring the possibility of engaging Cleveland-Cliff's employees in restoration or maintenance of restored areas is also a target at this site.



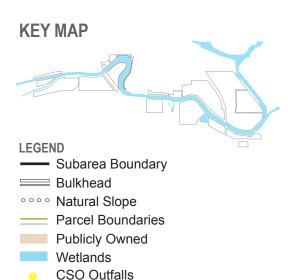
### **SUBAREA J**

# **COMED CORRIDOR**

# SITE TYPE: Mixed Ownership Restorable

#### SUBAREA MAP





#### SUBAREA DESCRIPTION

#### Location

Throughout project area, see subarea map above

#### **Ownership Status**

Public: ComEd

#### **Land Uses**

Vacant

#### **Dimensions**

Total Length: 6.5 miles River Frontage: 1,200 feet

#### **Historic Habitat:**

Varies

#### **Current Habitat:**

An approximately 1 and 2/3-mile Little Calumet River Commonwealth Edison Corridor falls within the Little Calumet River Conservation Action Plan project area. It provides a single-ownership open space corridor, already providing habitat values, that could be enhanced. Designing and implementing a habitat corridor restoration plan could result in opportunities for best management practices for water quality, native landscaping, and pollinator gardens. The ComEd Corridor is undoubtedly providing a migratory path for animals. Much of the corridor parallels railroad lines which expands its functional width. ComEd has a track record of restoring habitat in multiple locations throughout its service area.



The ComEd right-of-way at the Little Calumet River in the Golden Gate Neighborhood.

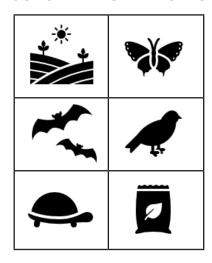


A DeKay's brown snake found at the ComEd right-of-way in Golden Gate.

#### **CONSERVATION STRATEGIES**

Planting and maintaining native shrubs interspersed with pollinator-friendly native herbaceous species (such as milkweed, asters and goldenrod) would provide habitat for declining shrubland birds, Monarchs, and bats. Once yearly mowing no earlier than August would also provide habitat for birds and reptiles.

Another target at right-of-ways is to develop stewards who would assist with restoration and maintenance. Exploration of the feasibility of employees or community groups participating in stewardship should be undertaken.



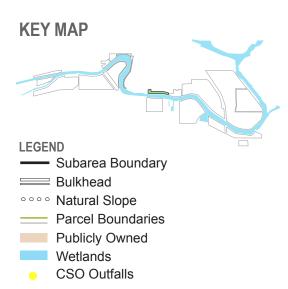
### SUBAREA K

# **COMMUNITY RIVERFRONT CONNECTIONS**

# SITE TYPE: Mixed Ownership Restorable

#### SUBAREA MAP





#### SUBAREA DESCRIPTION

#### Location

North bank of Little Calumet River between Beaubien Woods and Indiana Avenue

#### Ownership Status

Public: Cook County Land Bank, City of Chicago, Chicago Department of Transportation

#### **Land Uses**

Residential. Vacant, Open Space

#### **Dimensions**

- 1. Community park opportunity, 3.8 acres,
- 2. Bicycle center opportunity, 3.3 acres,
- 3. Ton Farm and community gardens opportunity, 8.4 acres

River Frontage: 1,500 feet

#### **Historic Habitat**

Forest/scattered oaks/prairie

#### **Current Habitat**

The Community Riverfront Connections sites were identified during an assessment of potentially available land that could be acquired as community open space to connect the neighborhoods west of Beaubien Woods and east of Indiana Avenue to the riverfront. Currently there is almost no access to the river from these neighborhoods. Through analysis of parcel ownership, discussions with community leaders, and surveys of community members, the following priority sites were identified: a community

park site, a site for a community garden and bike storage, a site to commemorate an area where an Underground Railroad safehouse existed in the past, and where community farms now exist, and potential trails and river access along CDOT right-of-ways. More detail about each of these opportunities can be found in Appendix A.

Habitat at the community park site is entirely wooded with a natural shoreline. The bicycle center site is a mixture of wooded habitat, turf grass, and unassociated grassy habitat. Much of the shoreline is bulkhead. The Ton Farm and community gardens site is wooded along a natural shoreline with row crops such as lettuce, unassociated grassy vegetation, and woody vegetation scattered throughout. A partially developed CDOT right -of -way runs east-west. Some dumping and derelict buildings are scattered throughout.



We Keep You Rollin' Bike & Wellness Group holds a tour in Golden Gate and Altgeld Gardens. The group seeks connections to regional trails.



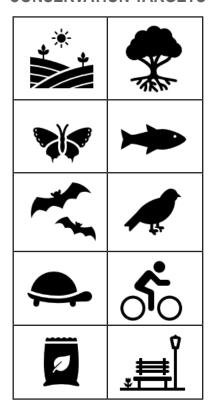
Crops growing in the area farmed by the community. Tree growth blocks a view of the river.

### **CONSERVATION STRATEGIES**

Targets for these sites include planting of pollinator-friendly native flowering plants and developing stewards to maintain them. Pollinator-friendly species, such as milkweeds, goldenrod, and evening primrose, would benefit monarchs and bats. All three sites have wooded habitat. Canopy thinning and removal of invasive woody species would allow more light to penetrate, facilitating restoration of pollinator-friendly native flowering plants through overseeding.

Targets also include creating trails and riverfront spaces on partially developed and undeveloped CDOT right-of-ways on all of these sites. Fixing potholes on the partially developed right-of-way that runs through the Ton Farm and community gardens site, and meeting with communities to visualize how riverfront parks could be designed to meet community goals are strategies for all three sites.

Strategies also include facilitating land acquisitions, transfers, and agreements so that the sites may be dedicated as public open space. Improving bank habitat for fish and macroinvertebrates could be targets at the community park site and the Ton Farm and community gardens site. Strategies include clearing invasive woody and herbaceous vegetation along the shore and adding overhanging native vegetation. If the bank needs stabilization after removal of invasive vegetation, introduction of root balls, which offer crevice habitat for fish as well as potential basking surfaces for reptiles, and/or fiber rolls which can help native vegetation become established, should be considered.



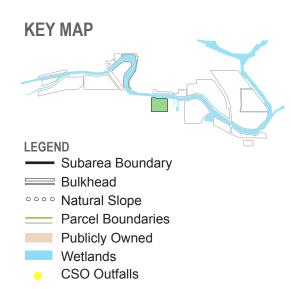
### **SUBAREA L**

# **GEORGIA PACIFIC & INNOPHOS**

# SITE TYPE: Mixed Ownership Restorable

### SUBAREA MAP





### SUBAREA DESCRIPTION

### Location

612 E. 138th Street Chicago, IL 60827

### **Ownership Status**

Private: Georgia Pacific, Innophos

### **Land Uses**

Industrial, Commercial

### **Dimensions**

Total Area: 70 acres River Frontage: 1,200 feet

### **Historic Habitat**

Prairie/wet prairie/marsh

### **Current Habitat**

The Georgia-Pacific site is developed with buildings and parking lots on the northern two-thirds of the property. The southern third comprises railroad tracks, with unassociated vegetation running along and between the tracks, and turf grass to the east of the tracks. The Innophos site, immediately to the east of Georgia-Pacific, is more than half wooded. The rest comprises buildings, parking lots and turf grass.

There are two National Wetland Inventory wetlands, one forested shrub and one palustrine emergent persistent wetland seasonally flooded. The flooded palustrine emergent wetland is visible on aerial photography and is about two acres in size. It is buffered with vegetation, likely Phragmites or cattails. A mowed area with power lines comes down at an angle across the eastern edge of the site, at least some of which is ComEd right-of-way. The Innophos site has municipal solid waste fill less than five feet thick covering approximately 15 acres.



Planting of pollinator-friendly native plants across the entire project area is essential to meeting the goal of improved ecological heath.



Native flowering plants enhance habitat for the endangered Monarch Butterfly. Image courtesy of Kenneth Dwain Harrelson (CC)

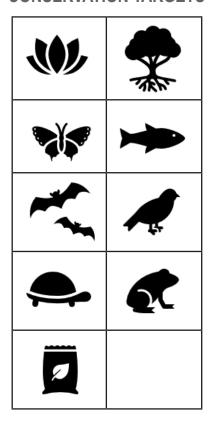
### **CONSERVATION STRATEGIES**

Conservation targets include introduction of native pollinator-friendly plants such as milkweeds that will support monarch populations. Habitat for bats could also be supported by planting and landscaping with native plants with white or yellow flowers that will attract insects such as moths in low light when bats are feeding. Planting could be done in vegetated areas along the railroad tracks after clearing of invasive woody and herbaceous species. Native flowering pollinator-friendly species could also be planted in areas that are currently turf grass and/or in beds created near parking lots and buildings, adding to the beauty of the landscape.

Both Georgia-Pacific and Innophos have turf grass that, if mowed just once a year (after August), could provide bird and reptile habitat.

Innophos has both wooded and wetland habitat. Canopy thinning in the wooded area along with removal of invasive woody species would allow more light to penetrate, facilitating restoration of herbaceous species such as pollinator-friendly flowering plants on the floor of the woodland. After thinning of wooded areas and removal of invasive species, overseeding with woodland/savanna and prairie mixes could take place. Innophos also has two wetlands on site and removal and control of invasive wetland species followed by seeding with wetland mixes, or installation of wetland plugs, would improve their quality. Restoration of emergent and shoreline wetland vegetation and maintaining connections between wetlands has the potential to benefit frogs and toads.

Another target at this site is to develop stewards who would assist with restoration and maintenance. Exploration of the feasibility of employees participating in stewardship should be undertaken.



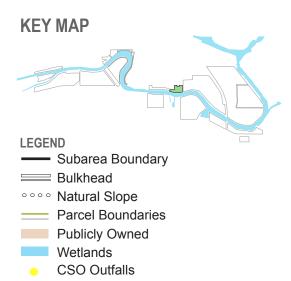
### **SUBAREA M**

# ALTGELD GARDENS WETLANDS

# SITE TYPE: Mixed Ownership Restorable

### SUBAREA MAP





### SUBAREA DESCRIPTION

### Location

134th Street, North of Little Calumet River

### **Ownership Status**

Public: City of Chicago; Cook County Forest Preserves Private: various private owners, Cook County Land Bank

### **Land Uses**

Primarily residential, some institutional and open space

### **Dimensions**

Total Area: 18 acres River Frontage: 300 feet

### **Historic Habitat**

Forest and marsh/wet prairie

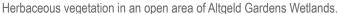
### **Current Habitat**

One large, 18 acre, high quality wetland covers most of the eastern part of the site. Scattered pothole wetlands, which comprise temporary vernal pools, occur on the western part. Plants are a mix of high quality wetland or wetland-associated plants, including bluejoint grass, awlfruit sedge, tatarian dogwood, wood fern, swamp rose, steeple bush, and invasives, including buckthorn, honeysuckle, purple loosestrife, garlic mustard, black locust, and Canadian thistle. A priority is conserving and protecting the high quality wetland, which can act as a seed source for other, degraded wetlands. Sedge species of the genus Carex and bluejoint grass are important sedge meadow plants. Preserving

and restoring the wetlands at this site will also support reptile, amphibian, and wetland bird habitat.

Preserving this entire area would also increase connectivity and reduce habitat fragmentation by forming a contiguous protected area with Beaubien Woods. There is community interest in creating a hiking path or bicycle trail that would connect Carver Park to Beaubien Woods through this site.







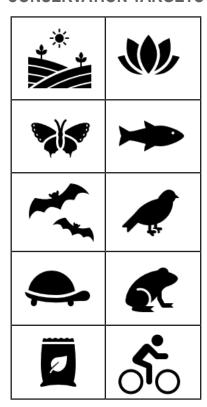
Much of the site is covered in wooded vegetation.

### **CONSERVATION STRATEGIES**

Conservation targets include protecting, restoring, and maintaining the wetlands at this site. Strategies to achieve these targets are installation of wetland plugs to augment the existing Carex population, interseeding with a wetland seed mix, and control of invasives, especially reed canary grass, common reed, and purple loosestrife. These invasives can significantly reduce reptile, amphibian, and wetland bird habitat. These are all targets at this site. Thinning or removing many of the invasive trees, likely introduced from nearby urban areas, such as silver maple, catalpa, black locust, and Siberian elm, would help increase understory light levels and help preserve current native sedge and grass populations. This would encourage growth of native pollinator-friendly flowering plants which would support monarch and bat populations. Prescribed burning could be an option in the future, but removal of overgrown brush and development of sufficient understory fuel would be necessary first.

This site is high priority for acquisition by an entity that would manage it for biodiversity.

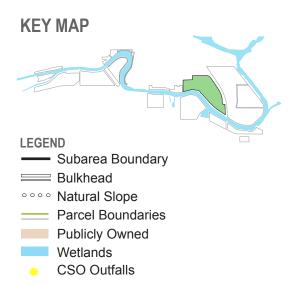
Other targets at this site include installation of trails to connect the communities to the west to Beaubien Woods and to this high quality site, as well as development of community stewards to assist with restoration and maintenance here.



# SUBAREA N BEAUBIEN WOODS SITE TYPE: Parks and Preserves

### SUBAREA MAP





### SUBAREA DESCRIPTION

### Location

W Doty Avenue S, southeast of E. 130th Street & S. Ellis Avenue Chicago, IL 60633

### **Ownership Status**

Public: Forest Preserves of Cook County

### **Land Uses**

Forest Preserve, Public Recreation, Right-of-Way

### **Dimensions**

Total Area: 293 acres River Frontage: 6,500 feet

### **Historic Habitat**

Scattered prairie, marsh, and forest. Past records of tree species and cover indicate a savannah or woodland character in the SE portion of the site. Historical records indicate that the site has been disturbed by agriculture and other human activities.

### **Current Habitat**

Beaubien Woods comprises picnic areas, trails, Flatfoot Lake (an artificial fishing lake), and a boat launch into the Little Calumet River. It is stewarded by the Field Museum with restoration work offered to volunteers. Efforts to connect it to neighborhoods to the west have been the focus of recent planning, resulting in the annual Beaubien Woods Celebration, construction of a hiking trail from Carver Military Academy to Flatfoot Lake, and now planning for an inviting gathering space, with community input.

The recently created African American Heritage Water Trail begins at Beaubien Woods.

Soil records indicate Beaubien Woods contains ancient beach ridge soils, glacial lake bottoms soils, and artificial fill. Cottonwood and silver maples are significant at this disturbed site. Substantial invasive wetland species occur, including cattails, reed canary grass, and Phragmites, as do the woody invaders buckthorn and honeysuckle. There is a sandy, mesic area near the north end of Flatfoot Lake that may be suited for oak savanna restoration. Oaks occur in the southeast corner of the site, along the river. An osprey pole stands near the boat launch, which is currently dominated by turf grass and a parking lot. Beaubien connects to the Altgeld Gardens Wetlands site to the west and Waste Management on the east.



The Little Calumet River water trail access at Beaubien Woods connects communities and visitors to the Little Calumet River.



Closed Bottle Gentian, this native wildflower is pollinated exclusively by bumblebees.

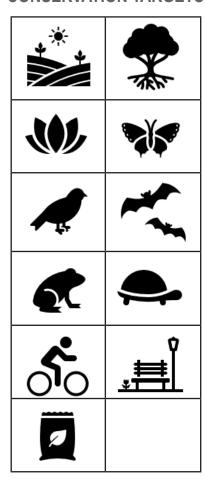
### **CONSERVATION STRATEGIES**

Given the soil types and the substantial wetland areas at Beaubien Woods, a primary target is to restore wet prairie and marsh. Restoration of the marsh at the south end of Flatfoot Lake, and the overgrown cat tail marsh at the north end of the preserve east of the railroad tracks, would benefit marsh breeding birds, such as bitterns and gallinues.

Restoration would include controlling *Phragmites* and managing cattails so that approximately half of the marsh is open water. Strategies involve removal of invasive wetland vegetation, seeding with wetland mixes, and installing wetland plugs. Treating re-sprouting invasive vegetation with herbicide, and seeding and installing plugs immediately after clearing invasives will increase the likelihood of success of the effort. Exploration of the potential to restore wetland hydrology could also be considered, and may be necessary to successful wetland restoration.

Other targets at Beaubien Woods could include mowing only once a year (and not until August) and overseeding with higher quality plant species, like pollinator-friendly natives that would support monarchs and bats, in areas of turf grass around the boat launch, around the osprey pole, and around Flatfoot Lake. This would also benefit grassland birds and reptiles and amphibians. Returning some unused turf grass areas to prairie or savanna plantings could also be a target. The FPCC has recently undertaken work to reduce the size of the parking lot and this may be an opportunity for native plantings.

Maintaining a consistent volunteer presence at this site is also a target, as is connecting the site to adjacent communities through trails and development of a gathering space designed with input from the community.

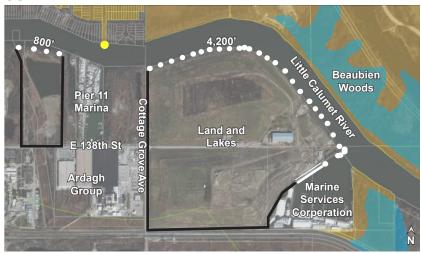


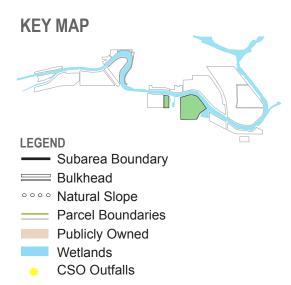
### **SUBAREA O**

# **LAND AND LAKES**

# SITE TYPE: Mixed Ownership Restorable

### SUBAREA MAP





### SUBAREA DESCRIPTION

### Location

River Bend Prairie Landfill, 801 E. 138th Street, Dolton, IL 60827

### **Ownership Status**

Private: Land and Lakes

### **Land Uses**

Capped Landfill, Active Landfill

### **Dimensions**

Total Area: 176 Acres

River Bend Prairie Landfill, 150 acres

Little Calumet Marsh site west of marina, 26 acres

River Frontage: 5,000 feet

### **Historic Habitat**

Prairie/wet prairie/marsh

### **Current Habitat**

Riverbend Prairie: This is a landfill with clay capping. Some vegetation is growing on the landfill, including both native and invasive plants, and the shoreline is natural. The landfill comprises a north hill and a south hill with a road running east-west between them. The south section has four small, linear historic wetlands according to the National Wetlands Inventory, designated as "unconsolidated bottom" indicating a lack of stable surfaces for plant and animal attachment.

Little Calumet Marsh: This site is owned by Land and Lakes and is separated from the Prairie Bend Landfill by Pier 11 Marina and the hunt club east of the Marina. Little Calumet Marsh has a mix of native and non-native species. Natives include some higher quality prairie species like common boneset, gray coneflower, and bergamot. Much of the site is taken up by what used to be a large pond (included in the National Wetlands Inventory as a palustrine unconsolidated bottom wetland) of approximately seven acres. The wetland is currently being filled. There is woody vegetation along the river, and herbaceous vegetation throughout the site. A gravel road extends from 138th Street to the river and a gravel parking area. There is an outfall into the river from this site.



South facing view from the north hill at Land and Lakes. The road between the north and south hills is visible.

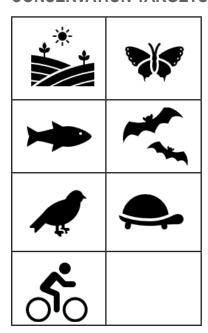


The pond at Little Calumet Marsh with invasive *Phragmites* growing around it.

### **CONSERVATION STRATEGIES**

Planting of pollinator-friendly native plant species at these sites, including milkweeds, goldenrods, and asters, among others, is a target and would support conservation of Monarchs and bat species. Much of the Riverbend Prairie site has clay caps and development of soils to cover these is a priority. Strategies include removal of invasive woody and herbaceous vegetation, and overseeding with pollinator-friendly species in areas that can support plant growth. Bird and reptile habitat could be enhanced throughout the Riverbend Prairie and Calumet Marsh sites by mowing only only once a year (and not until August) in grassy areas and overseeding with higher quality plant species (like pollinator friendly natives). Keeping or placing flat rocks, and keeping some leaf litter and downed limbs would benefit reptiles.

As the landfills reach capacity and close, these sites could be repurposed for connecting communities to natural areas and the river. Trails, signage, and potentially a bat house and/or an osprey nesting platform could also be placed here to connect and educate visitors. Removal of invasive woody vegetation at the riverfront could allow more light and room for native species. Bank stabilization could be done in conjunction with this work and use of root balls, which offer crevice habitat for fish as well as potential basking surfaces for reptiles, and/or fiber rolls which can helpnative vegetation become established, should be considered.

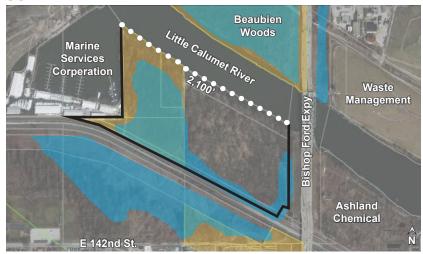


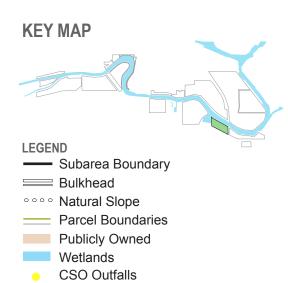
### **SUBAREA P**

# **BISHOP FORD VACANT**

# SITE TYPE: Mixed Ownership Restorable

### SUBAREA MAP





### SUBAREA DESCRIPTION

### Location

Directly east of Land and Lakes Prairie Bend Landfill and immediately west of the Bishop Ford Expressway

### **Ownership Status**

Public: Village of Dolton

Private: Slurry Systems Inc., Sun Coatings Paint Centers Inc.

### **Land Uses**

Vacant

### **Dimensions**

Total Area: 47 acres

River Frontage: 2,100 feet

### **Historic Habitat**

Predominantly prairie/wet prairie/marsh with bottomland at the eastern edge

### **Current Habitat**

This site is completely undeveloped with three connected National Wetlands Inventory emergent and forested/shrub wetlands running along the western and southern edges of the site and taking up the western third of the site. Unpaved roads run through the site, but are more sparse in the wetland areas. The southern part of the wetland at the western end of this site is grass/shrub and the northern part is wooded. The entire shoreline is natural. The eastern part of the site has steel industry waste less than five feet thick. This site is across the river from Beaubien Woods.



Milkweed is a native pollinator-friendly species that supports monarch butterflies.

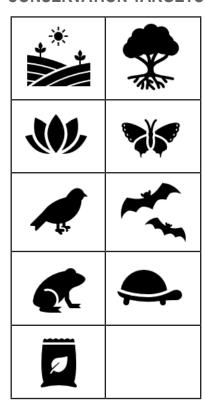


The evening bat is one of the bat species found in the project area. Image courtesy of Enwebb (CC)

### **CONSERVATION STRATEGIES**

Conservation targets include introduction of native pollinator-friendly plants such as milkweeds that will support monarch populations. Habitat for bats could also be supported by planting native plants with white or yellow flowers that will attract insects such as moths at night when bats are feeding. Installation of a bat house could also be considered. This site has both wooded and wetland habitat. Canopy thinning in the wooded area along with removal of invasive woody species would allow more light to penetrate, facilitating restoration of herbaceous species such as pollinatorfriendly flowering plants. After thinning of wooded areas and removal of invasive species, overseeding with woody/savanna and prairie mixes could take place. This site may also have potential for creation of open shrubland for declining shrub birds. Strategies for this include planting of native shrubs interspersed with herbaceous plantings. If wetland hydrology and wetland vegetation is still present, removal of invasive vegetation and seeding with wetland mixes and installing wetland plugs would be strategies to improve their quality. Restoration of emergent and shoreline wetland vegetation and maintaining connections between wetlands has the potential to benefit frogs and toads. Keeping or placing flat rocks and keeping some leaf litter and downed limbs would benefit reptiles.

Another target at this site is to develop stewards who would assist with restoration and maintenance. This site connects to the Ashland Chemical priority site to the east and exploration of potential for Ashland employees to become involved here could be valuable.



# **SUBAREA Q**

# **ASHLAND CHEMICAL**

# SITE TYPE: Mixed Ownership Restorable

### SUBAREA MAP



# KEY MAP LEGEND Subarea Boundary Bulkhead Natural Slope Parcel Boundaries Publicly Owned Wetlands CSO Outfalls

### SUBAREA DESCRIPTION

### Location

14303 Paxton Avenue, Calumet City, IL 60409

### **Ownership Status**

Private: Ashland Chemical Inc.

### **Land Uses**

Industrial, Commercial, Vacant

### **Dimensions**

Total Area: 58 acres

River Frontage: 1,050 feet

### **Historic Habitat**

bottomland/lowland timber, marsh/wet prairie

### **Current Habitat**

The western half of this site is largely undeveloped, with a paved road running along the shoreline and some thin (probably gravel) roads running through other parts of the western half of the site. It is covered by unassociated grass and shrubs, with some scattered trees. The National Wetlands Inventory shows a linear palustrine emergent wetland running east-west for almost a half mile along the bottom of this western half of the site.

The eastern half is developed with buildings but also has open grassy areas. The Cal-Sag trail, programmed by the Dolton Park District, crosses this site and runs within it for almost one half mile. The shoreline is natural. There is dredging spoil on-site with a

thickness of less than five feet. This site connects with Bishop Ford Vacant and is in close proximity with Dolton Prairie, 265 feet to the south.



Open shrubland benefits declining shrub birds such as the white eyed vireo. Courtesy of Andy Reago and Chrissy McClarren (CC)



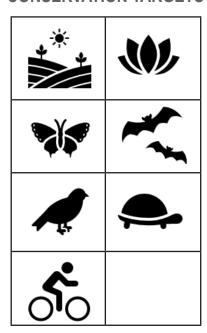
Evening blooming native plants attract pollinators such as moths at night, supporting native bat populations. Courtesy of Alexlancashire

### **CONSERVATION STRATEGIES**

Conservation targets include introduction of native pollinator-friendly plants such as milkweeds that will support monarch populations. Habitat for bats could also be created by planting native plants with white or yellow flowers to attract insects such as moths at night when bats are feeding. Planting could be done by overseeding in open vegetated areas after clearing of invasive woody and herbaceous species. Birds and reptiles would be supported by the cover provided if mowing takes place only once a year (and not before August). Planting of native flowering plants could also be done in areas that surround parking lots and buildings, adding to the beauty of the landscape.

This site may have potential for creation of open shrubland for declining shrub birds. Strategies for this include planting of native shrubs interspersed with pollinator-friendly herbaceous species. The path for the programmed Cal-Sag bicycle trail goes through this site and native shrubland along this trail is a general recommendation of this CAP. Keeping or placing flat rocks and keeping some leaf litter and downed limbs on site would benefit reptiles.

Another target at this site is to develop stewards who would assist with restoration and maintenance. Exploration of potential for Ashland employees to become involved here could be valuable.



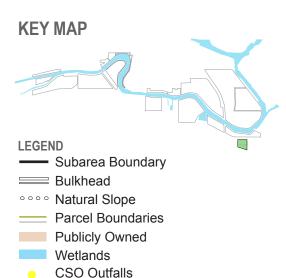
# **SUBAREA** R

# **DOLTON PRAIRIE**

### SITE TYPE: Parks and Preserves

### SUBAREA MAP





### SUBAREA DESCRIPTION

### Location

1999 Dolton Road, Calumet City, IL 60409

### **Ownership Status**

Forest Preserves of Cook County

### **Land Uses**

Open Space

### **Dimensions**

Total Area: 24 acres River Frontage: None

### **Historic Habitat**

**Primarily Bottomland** 

### **Current Habitat**

Dolton prairie contains a protected remnant of high-quality wet prairie on its eastern third. It is an Illinois Natural Area Inventory (INAI) site, with the highest rating (A). It contains two drainage ditches. The western two thirds of the site comprise a degraded, formerly agricultural field that was covered with construction debris following its removal from agriculture and is now covered primarily with unassociated woody growth. The soil type in the area is defined by medium to fine water-deposited materials, resulting from the site's close proximity to the Little Calumet River.

Plants observed on site through iNaturalist include many fairly conservative wet sandy prairie species including earth loosestrife,

bushy water primrose, tufted loosestrife, prairie cordgrass, common dogbane, bluejoint grass, and tussock sedges. Some adventive species, both native and non-native, still persist including Phragmites, cattails, reed canary grass, purple loosestrife, and buckthorn. Many of the observed plants are very pollinator-friendly and potentially indicative of a healthy insect population, including multiple varieties of milkweed.





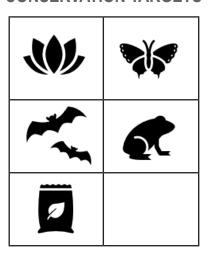


A view of the degraded wooded area of Dolton Prairie.

### **CONSERVATION STRATEGIES**

The primary conservation target is the continued preservation and restoration of a historic wet sandy prairie. Investigation of the relationship of drainage structures to the site's hydrology would be a good first step in restoring or improving the hydrology. The original hydrology may not be restorable due to the large amounts of spoil on-site. Improving degraded areas next to the wetland remnant by removing invasive species would help buffer and protect it.

Restoration work over the past few years has included removal of adventive woody and wetland species within the remnant wetland areas. This work should be continued and expanded. A priority is removing reed canary grass along the edge of the remnant to prevent reinvasion. Given the fill and soil disturbance in the western two thirds of the property, a complete reconstruction would be necessary before it would resemble any natural community. However, adventive and invasive native trees could be removed . A regular burn schedule would reduce buckthorn populations, while herbicide applications would help control invasive wetland species. This would open the area to more light and reduce the chance of the remnant wetland being invaded by invasive seed sources from the unassociated woody area. This work would protect the wetland and allow for persistence of native wetland vegetation including pollinator-friendly species that support monarch and bat populations. The persistence of the high quality wetland also has the potential to support native amphibian species such as the western chorus frog and American toad. Dolton Prairie has been restored and maintained with the help of volunteer stewards and continued participation and recruitment of volunteers to steward this site is also a target.



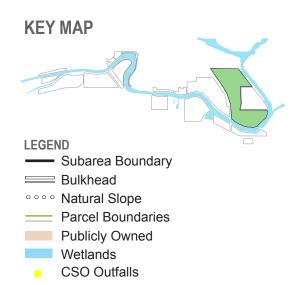
### **SUBAREA S**

# **WASTE MANAGEMENT**

# SITE TYPE: Mixed Ownership Restorable

### SUBAREA MAP





### SUBAREA DESCRIPTION

### Location

138th Street and Bishop Ford Freeway, Chicago, IL 60633

### Ownership Status

Private: Waste Management

### **Land Uses**

Landfill, Commercial

### **Dimensions**

Total Area: 412 acres River Frontage: 1,250 feet

### **Historic Habitat**

Bottomland, marsh/wet prairie, minimal forest

### **Current Environmental Conditions**

This is a landfill with landcover of grass or other herbaceous vegetation, and roads throughout. About a fourth of the site, occurring in the central area, is developed with buildings and parking lots with herbaceous vegetation or turf grass interspersed within the developed area. The shoreline is natural except where the O'Brien Lock and Dam runs along the shoreline for approximately 0.64 miles; it is armored over this expanse. Much of the shoreline appears to be vegetated with herbaceous open land cover, with some trees interspersed.

A very small (approximately one acre) palustrine unconsolidated bottom wetland is noted on the National Wetlands Inventory in the

southeastern corner of the site. This site connects to two other sites, Park #576 to the east, with which it is contiguous, and Beaubien Woods on the west.



Bolstering fish and macroinvertebrate populations with overhanging shoreline vegetation also supports fish eating birds such as this bald eagle photographed near Beaubien Woods.



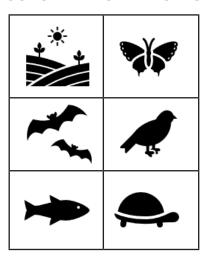
Vegetation mowed just once a year and leaf litter provide habitat for birds and reptiles.

### **CONSERVATION STRATEGIES**

Planting of pollinator-friendly native plant species, including milkweeds, goldenrods, and asters, among others, is a target and would support conservation of monarchs and bat species. Strategies include removal of invasive woody and herbaceous vegetation, and overseeding with pollinator-friendly species in areas that can support plant growth. Planting could be done in areas that surround parking lots and buildings, adding to the beauty of the landscape.

Bird and reptile habitat could be enhanced throughout the site by mowing only once a year (and not until August) in grassy areas and overseeding with higher quality plant species (like pollinator-friendly natives). Keeping or placing flat rocks, and keeping artificial (like pieces of concrete) or natural (like leaf litter and downed limbs) cover in places throughout the site would benefit reptiles.

Keeping the bank relatively open with areas without tree canopy could benefit aquatic turtles by potentially offering nesting habitat. Exploration of the feasibility of introducing overhanging vegetation at the bank has the potential to benefit fish and macroinvertebrates.



### **SUBAREA T**

# **PARK** #576

# SITE TYPE: Parks and Preserves

### SUBAREA MAP



# KEY MAP LEGEND Subarea Boundary Bulkhead Natural Slope Parcel Boundaries Publicly Owned Wetlands CSO Outfalls

### SUBAREA DESCRIPTION

### Location

2100 E. 134th Street, Chicago, IL 60633

### **Ownership Status**

Public: Metropolitan Water Reclamation District, Leased to

Chicago Park District

### **Land Uses**

Vacant, Open Space

### **Dimensions**

Total Area: 144 acres
River Frontage: 1,150 feet

### **Historic Habitat**

Bottomland, marsh/wet prairie

### **Current Environmental Conditions**

This site is surrounded on the north, south and west by Waste Management's landfill. On the east, a narrow strip of land associated with O'Brien Lock and Dam runs along the park edge for about a third of a mile. Below that, the eastern edge of the park is contiguous with the river, and has about a fourth of a mile of river frontage with a natural bank. Soil remediation and clay capping are in progress at parts of this site.

Currently, most species are non-native, including both woody and herbaceous species. However, park district staff has seen snakes and turtles. Native plants include whorled milkweed, a facultative

wetland species and nodding lady's tresses, common to dry prairies and black oak savannas.

The approximately 23-acre Whitford Pond is located at the south end of the site. Just north of Whitford Pond is a 19 acre freshwater emergent wetland that appears on the National Wetlands Inventory. The southeastern part of this wetland was flooded during the project team's site visit. There is also a roughly square 10-acre pond in the north part of the park, with the northern edge paralleling 134th Street. Secretive marsh birds such as bitterns. gallinules, and grebes are currently being monitored at several locations in the Calumet Region, including Park #576. Monitoring indicates marsh restoration positively impacts birds.

In 2015 a water control structure was installed and invasive wetland vegetation was removed at Big Marsh (a park district site north of Park #576) and now least bitterns and pied-billed grebes are nesting there.



Marsh restoration would support American Bitterns and other marsh breeding birds. Image courtesy of Linda Tanner (CC)



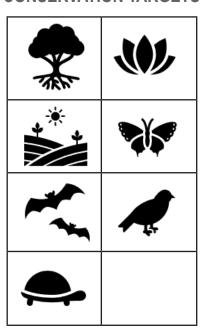
Trees and vegetation along the road through Park #576.

### **CONSERVATION STRATEGIES**

A target at Park #576 is wetland restoration, including marsh restoration at Whitford pond on the southern part of the site. Calumet Open Space Reserve Plan identifies Whitford as waterfowl habitat, especially if the potential emergent wetland associated with it is restored. Invasive wetland species like reed canary grass, common reed, and purple loosestrife would need to be cleared. Mechanical, chemical, and biological control of invasive species are strategies, as well as overseeding with wetland seeds and installing wetland plugs. Restoration of marsh vegetation at Whitford Pond could support marsh breeding birds if a structure is also installed to control water levels. Wetland restoration could also benefit amphibians, such as bullfrogs, green frogs, western chorus frogs and toads.

Another target is enhancing reptile habitat since park district staff have seen snakes and turtles. Retaining or placing flat rocks on site or retaining other cover such as leaf litter, unmowed grass, and tree limbs would be strategies, along with promoting habitat diversity. Removal of invasive woody and herbaceous vegetation and overseeding with pollinator-friendly plant species would benefit monarchs and bat species as well as reptiles. Consider installation of bat houses on site.

A priority at this site is soil remediation. Chicago Park District and soil scientists are currently working on soil solutions over clay caps so that planting can be done. Conservation strategies should follow since restoration would be much more feasible with improved soil. There is potential for restoration of savanna communities at this site and strategies would be thinning of woody vegetation, overseeding with savanna mixes and controlled burns. With the nearby woodlands at Beaubien, savanna restoration would establish a variety of niches and habitats.



# SITE PRIORITIZATION

A matrix summarizing the characteristics of the priority sites was created and linked to the priority site GIS layer. The matrix and GIS layer can be used to identify opportunities for acquisitions or leases, and coordinated restoration and management. See the Additional Resources section of this CAP for information about accessing the matrix and GIS layer.

Sites vary in size from 3.3 acres to 417 acres. The largest are the two landfills, three FPCC-owned sites, including Joe Louis Golf Course, Whistler Woods, and Beaubien Woods, and Park #576, owned by the Water Reclamation District and leased by the Chicago Park District. The rest of the sites are considerably smaller, with none over 50 acres.

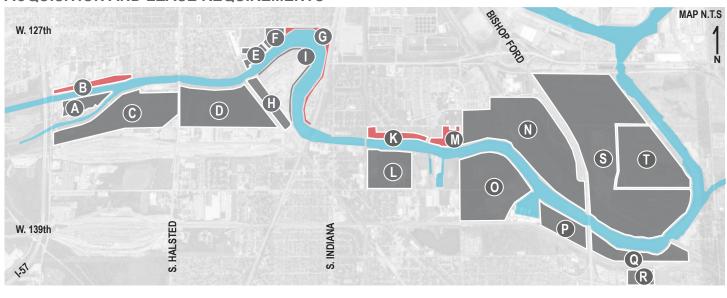
All sites except Dolton Prairie have at least some river frontage, with Cleveland Cliff's shoreline and Waste Management each having more than 1-mile. The vast majority of river frontage associated with priority sites is characterized as natural slope, which presents miles of opportunities for bank improvements, such as overhanging vegetation and creation of bank crevice habitat, to benefit target species.

Over half of the sites connect directly to at least one other site. Of those without a direct connection, the farthest distance from one to the nearest other is about 265 feet. These disconnections are often just formed by a road between sites, or in some cases, the river flowing between sites. Several sites connect directly to two or more sites. These present opportunities for collaborative restoration projects. Seven sites connect directly to a site that is 50+ acres in size. Restoration and management of these could enhance the larger sites, four of which are forest preserves.

Several sites present potential opportunities for acquisition or leases by or to an entity that would manage them for biodiversity and/ or as public open space. Water Reclamation District sites need to be leased to another agency that would restore and maintain them. The site of Altgeld Gardens Wetlands and the Community Riverfront Connections sites need to be acquired from the City of Chicago and the Cook County Land Bank.

The matrix and GIS file can be used to visualize the priority sites that currently have public access, as well as those identified as important to communities, either because they are in use by communities now, or because they exist as open space or trail connections in community-based planning efforts.

### **ACQUISITION AND LEASE REQUIREMENTS**



# **CONCLUSIONS & TAKEAWAYS**

To our knowledge, this is the first plan to envision conservation in this corridor at the site scale. From this building block, we hope that conservation in the region can start to go deeper (specific moves forward at each site); broader (integration of this planning process and its vision into the goals and visions of neighboring communities); and longer (extending the scope in either direction up the waterway.) Specific next steps include:

Share the findings of the CAP with interested stakeholders.

Meet with landowners, land managers, and communities to make them aware of the CAP and its recommendations and assess their interest in making site-specific plans for restoration, public access, or trail building.

Consider a workshop with industrial and landfill owners to share the broad corridor vision and begin coordinated planning.

Move forward with land acquisitions, leases and agreements where necessary to protect, restore, and develop trails at and for priority sites.

Assess grant opportunities and work with interested landowners and communities to plan and apply for

funding for acquisition, management, and/or public engagement.

With appropriate stakeholders, hold a workshop to explore the idea of a land trust for Calumet brownfields.

Consider creating or coordinating a conservation and maintenance crew that could help maintain habitat restoration, public open spaces and trails. This would include investigation of the potential for developing stewardship groups among employees at industries and landfills, either to steward restoration at their own worksite or in other places. It would also include identification of funding sources to pay and train community members to lead volunteers in maintenance work, and to do outreach to schools, churches, and community groups to engage them with restored spaces, community open space, and trails.

# **ADDITIONAL RESOURCES**

# PRODUCTS THAT ACCOMPANY THIS DOCUMENT

Interactive map created for assessment of priority sites for this CAP

See facing page for screenshot of <u>online interactive</u> <u>map</u>. The matrix is included as a layer on the interactive map and is also available in spatial data formats (shapefile and keyhole markup language).

### OTHER PLANNING RESOURCES

There are several other plans and planning tools available electronically that complement this plan and offer insight into the Calumet Area.

Conservation Action Plans from the Calumet Land
Conservation Partnership (CLCP) for other Calumet
Region geographies

### **Our Great Rivers**

A Vision for the Chicago, Calumet, and Des Plaines Rivers

### Calumet Open Space Reserve Plan

<u>The Calumet Area Ecological Management Strategy,</u> 2002

<u>Calumet Design Guidelines from the City of Chicago</u> Establishes unique landscape standards for Chicago's Far South Side.

### Calumet Heritage Area

The CAP planning area is within the Calumet Heritage Area.

# Friends of the Chicago River's Chicago River System Public Land Assessment Tool

An interactive map with many helpful data layers for conservation planning, covering the entire Chicago River waterway system, including the Little Calumet River.

Chicago Wilderness Oak Ecosystem Recovery Plan

The African American Heritage Water Trail
Story Map

Offers information about historical and cultural

aspects of the project area.

# RESOURCES FOR COMMUNITUES AND PRIVATE LANDOWNERS

### Conservation at Home

Assists residents of Cook County in adopting practices that will provide wildlife and native plant habitat in residential, school and workplace gardens.

### **TreeKeepers**

Keep trees healthy and volunteer in a variety of situations from street tree care and tree planting to woodland stewardship and advocacy.

# RESOURCES FOR INDUSTRIAL AND LANDFILL OWNERS

Wildlife Habitat Council assists companies in enhancing biodiversity.

### A LOCAL EXAMPLE

In 2014 a prairie reconstruction was undertaken at ArcelorMittal Riverdale with the Wildlife Habitat Council. This prairie reconstruction transformed what once was a parking lot into a habitat with native plants that reduce pollution and stormwater surge, create wildlife habitat, and enhance quality of life. Due to the fragmentation and degradation of natural habitats, restoration and reconstruction has become more important than ever. A <u>field guide</u> to the native plants installed at this site is available to the public.

# POTENTIAL FUNDING MECHANISMS FOR RESTORATION AND PLANNING

Chi-Cal Rivers Fund

Illinois Coastal Management

**Boat Launch Area Development** 

Recreational Trails Program

# **FUNDERS & PROJECT TEAM**

The Little Calumet River Conservation Action Plan was created by Openlands, Metropolitan Planning Council, and the Field Museum. It was funded by the Gaylord and Dorothy Donnelley Foundation and ArcelorMittal through the Calumet Land Conservation Partnership (CLCP).

Laura Barghusen of Openlands served as Project Director, with overall project support from Christina Harris of Metropolitan Planning Council (MPC).

Jordan Bailly from MPC led the design and layout of the document, including its maps.

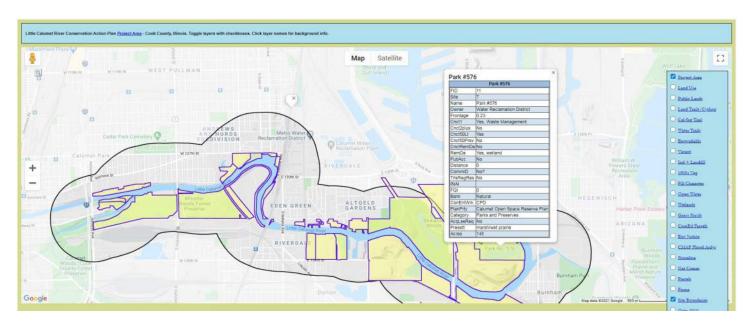
Craig Shillinglaw of Openlands created the interactive map used to evaluate the sites and created the GIS map layer of priority sites.

Other members of the team assisted with site inventory, assessment of restoration potential, natural history background, report drafting, and editorial or other support. These include Chris Bourbois, Ders Anderson, Linda Masters, Kate Schriner, Bob Megquier, Stacy Meyers, Molly Kordas (Openlands), Chloe Gurin-Sands, Josh Ellis (MPC); Mark Bouman, Laura Milkert, Alan Resetar, Iza Redlinski, and Doug Stotz (Field Museum).

A very special thank you to site owners and land managers who provided access to sites, background information, guided tours, and fruitful discussion in person or by phone. This group includes Mary Margaret Cowley (Land and Lakes); Ryan Hill (ArcelorMittal, now Cleveland-Cliffs); Matt Freer, Lauren Umek (Chicago Park District); Rebecca Collings, Dan Spencer, Lydia Uhlir (Forest Preserves of Cook County); Bill Rehanek (Joe Louis Golf Course); Joe Schuessler, Rick Belaire, Cedrick Robertson, Ed Staudacher, Steve Whitehead (Water Reclamation District);

A special thank you is also extended to John Quail and Adam Flickinger of Friends of the Chicago River for allowing us use of their data layers on the interactive map created for this project, and to Deloris Lucas, Fatimah Al-Nurridin (We Keep You Rollin' Bike & Wellness Group), Tom Shepherd, Larry McClellan (Little Calumet River Underground Railroad Project), and Cheryl Johnson (People for Community Recovery) for assistance in creating a vision for the Community Riverfront Connections sites.

### INTERACTIVE ONLINE MAPPING TOOL



# APPENDIX A: DETAIL FOR SUBAREA K COMMUNITY RIVERFRONT CONNECTIONS

The Community Riverfront Connections sites were developed to meet community goals as well as ecological conservation targets. Details about these goals are presented in this appendix.

### COMMUNITY PARK

The project team identified a potential place for a community park on 17 parcels owned by the Cook County Land Bank and the City of Chicago at the riverfront just west of the active Union Pacific Rail line that separates the neighborhood of Golden Gate from the Pangea Lakes, Riverside Village and Concordia Place apartment complexes. These parcels are currently covered with woody vegetation. A park in this location would be the first serving Riverside Village/Pangea Lakes/Concordia Place and would be only two blocks from DuBois Elementary School. Historically this area was part of the Dolton Farm; the Doltons were active participants in the Underground Railroad, presenting opportunities for interpretation that would meet community goals of spaces for children and having a place to learn about the history of the neighborhood and the Underground Railroad. This site is a little over a mile from the boat launch at Beaubien Woods. If a canoe launch were established here it would allow for short interpretive tours of this portion of the African American Heritage Water Trail.

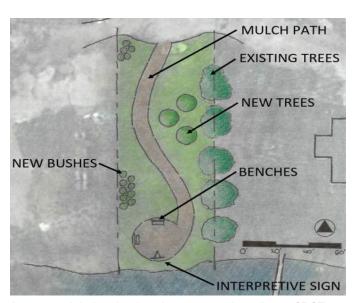
### **COMMUNITY GARDEN & BIKE STORAGE**

The project team, in collaboration with the local group We Keep You Rollin' (Bike & Wellness Group), identified space for bike storage and bicycle programming for the local group We Keep You Rollin' (Bike & Wellness Group) on two parcels currently owned by the Cook County Land Bank on the south side of 134th Street just east of where Eberhardt Avenue meets 134th Street. These parcels, along with connecting undeveloped and partially developed CDOT right-of-ways, could be maintained as a community garden, bike storage and gathering space connected to walking and biking routes. This ties into community goals of a place where bikes are available as well as connected trails for biking or walking. These parcels and right-of-ways currently comprise a combination of woody and herbaceous unassociated vegetation. Of particular community interest is the creation of a community park on the undeveloped CDOT right-of-way where Vernon Avenue dead ends at the Little Calumet River.

# FREEDOM SEEKERS FARMHOUSE SITE AND COMMUNITY FARMS

The project team, in collaboration with the Little Calumet River Underground Railroad Project, We Keep You Rollin' (Bike & Wellness Group), and People for Community Recovery, identified space owned by the Cook County Land Bank between St. Lawrence Avenue and Corliss Avenue along the Little Calumet River on the south side of 134th Place, comprising 22 parcels, and on the north side of 134th Place, comprising 23 parcels.

Acquisition of these parcels as public open space would allow a place to commemorate the freedom seekers who traveled through the historic Ton Farm safehouse site, as well as ensuring that community members who currently raise garden vegetables on the majority of these parcels are able to continue to do so. This open space would also provide riverfront access along the Little Calumet to the adjacent communities of Altgeld Gardens and Golden Gate. Currently there is almost no public access to the water. Preservation of land here ties into community goals of places to learn about the history of the neighborhood and Underground Railroad. These parcels are farmed, with associated woody vegetation along the riverfront.

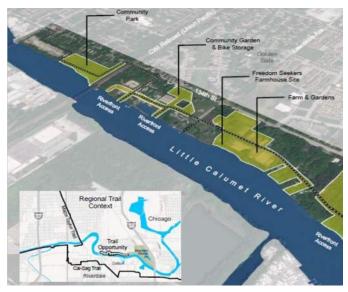


A conceptual design showing what a community park on a CDOT right-of-way that ends at the river might look like.

# BICYCLE AND WALKING TRAILS ON CDOT RIGHTS-OF-WAY

The partially developed 134th Place CDOT Right-of-Way, which runs parallel to the river past the farmed properties presents an opportunity for an interpretive trail featuring Underground Railroad and other neighborhood history, as well as wildlife viewing, and other amenities.

Connected CDOT rights-of-way could be used to create trails for walking and biking parallel to the river, and on right-of- ways that lead to the river from the neighborhoods. Development of these for biking could provide connections to the Cal-Sag Trail, and the Major Taylor Trail, effectively connecting the neighborhoods west of Beaubien Woods to the regional trails system. This would tie into the community goal of connected trails for walking and biking. The rights-of-ways are a mix of developed and undeveloped, and the land cover varies from woody and herbaceous growth to gravel and paved surfaces.



The community riverfront connections sites. The dashed line shows CDOT right-of-ways that are potential trails and open spaces.





Openlands protects the natural and open spaces of northeastern Illinois and the surrounding region to ensure cleaner air and water, protect natural habitats and wildlife, and help balance and enrich our lives.



Since 1934, the Metropolitan Planning Council (MPC) has been dedicated to shaping a more equitable, sustainable and prosperous greater Chicago region.



The Field Museum fuels a journey of discovery across time to enable solutions for a brighter future rich in nature and culture.

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