

#### Dear Chicagoans:

The idea for the Calumet Open Space Reserve was born out of the *Calumet Area Land Use Plan*, a plan for sustainable development of the land around Lake Calumet on the southeast side of Chicago. In attempting to create a plan that promoted industrial redevelopment while protecting wetlands, the opportunity to create an enormous urban nature preserve emerged.

As proposed by the *Calumet Area Land Use Plan* and as detailed in this document, approximately 4,000 acres of the Calumet area are slated to become part of the Calumet Open Space Reserve. These lands and waters support large populations of herons, egrets and other water birds. Marshes and open lands will eventually be interconnected by hiking and biking trails. The acquisition and management of the first round of properties for the Calumet Open Space Reserve is already being undertaken by a coalition of state and local agencies.

Residents and workers in the Calumet area will benefit from daily interaction with nature, and all Chicago residents will be able to enjoy what will become the City's largest nature reserve. Eventually it will be possible to bike from the Loop to the Reserve on protected trails.

Together with the City's Tax Increment Financing (TIF) District and Planned Manufacturing District (PMD) established in the Calumet area to sustain and develop industry, this plan for the Calumet Open Space Reserve will help bring a bright future to Chicago's southeast side.

Sincerely,

Richard M. Daley Mayor



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City of Chicago Department of Planning and Development

IN PARTNERSHIP WITH

Calumet Area Industrial Commission

City of Chicago Department of Environment

**Openlands Project** 

Southeast Chicago Development Commission

# An Abundance of Wildlife and Recreational Opportunities

The enormous number of birds that inhabit the wetlands was what first attracted naturalists' interest in the Calumet area. For many decades, birders have visited the region to watch the herons, egrets, ducks and shorebirds that pause during migration or nest here through the warm months. Black-crowned night herons, yellow-headed blackbirds, stilt sandpipers, and dowitchers can all be seen here. Over 200 species of birds are known to visit or stay in the Calumet area every year.

More recently, investigations have revealed that there are other natural attributes to the Calumet area beyond the birds. Aquatic life is surprisingly abundant, considering that many bodies of water are degraded, dredged or filled. Lake Calumet, for example, has over 20 species of fish. Anglers at Wolf Lake catch northern pike, walleye, yellow perch, bluegill and six other species of interest to sportsmen. There has even been a report that a lake sturgeon, the largest indigenous fish in the Great Lakes, was caught in Indian Creek.

Rare mammals such as Franklin's ground squirrels and red bats find suitable habitat in the protected uplands of forest preserves. The region is home to unusual amphibian and reptile species such as Blanding's turtles, blue-spotted salamanders, and red-bellied snakes.

Once more lands are protected and opened to the public, residents and visitors will have the chance to enjoy the natural bounty of the region as never before. They will be able to watch birds in areas previously closed off from view; they will have better access to fish the rivers and lakes; and they will be able to explore the entire area through an extended network of trails.



Black-crowned night heron

# **Ownership and Land Use**

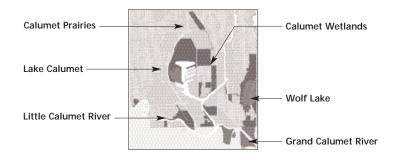
The Calumet Open Space Reserve is a 3,900-acre complex of wetlands, prairies, trails and recreation lands first proposed in the *Calumet Area Land Use Plan*. From its inception, the vision for acquiring, managing, restoring, and protecting lands in the reserve has been recognized as a shared, cooperative effort between governmental entities.

There are three open space managers in the Calumet area. The Illinois Department of Natural Resources (IDNR) currently owns the William Powers Conservation Area which encompasses the land around Wolf Lake in Illinois. Given its statutory mandate to protect and manage our state's natural resources, the IDNR is projected as the owner of the lands in the reserve that are known to provide habitat for threatened and endangered species.

The Forest Preserve District of Cook County (FPDCC) currently is the largest open space manager in the Reserve with over 940 acres in four forest preserves. The FPDCC's mission is the preservation of Cook County's prairies, wetlands and riparian environments. Preserving undeveloped land can expand the two forest preserves along the Little Calumet River and add to its sense of wildness. In addition, two exceptionally high-quality regional landscapes – Burnham Prairie and Powderhorn Lake and Prairie – can be expanded and buffered by the acquisition of adjacent lands.

The Chicago Park District (CPD) is the primary manager of recreational lands, facilities and programs in Chicago. In addition, CPD owns and manages all 24 miles of Lake Michigan shoreline and natural areas throughout the City.

CPD can play an important role in the reserve by managing the lands that people will use most often. Those lands include the trails that connect the natural areas to each other and to the neighborhoods. In addition, CPD's programming breadth and expertise can be used to engage the public in the overall reserve.



The Illinois International Port District owns and operates the Harborside International Golf Center, a 36-hole championship golf course. This 435-acre, award-winning development designed to emulate a Scottish links style course contributes to the open space of the region.

An important new feature in the Reserve will be the Ford Calumet Environmental Center. The Center, spearheaded by Chicago's Department of Environment (DOE), will provide programming focused on the environmental, industrial, and cultural history of the area.

A set of ten maps is provided in the the folder at the back of this plan. The first map contains the image you see above which illustrates the entire Calumet Open Space Reserve and names each of the six units. This map is followed by another map that shows existing ownership and open space opportunities. Detailed maps of each unit follow. The last two maps show the local and regional trail systems that exist and are proposed for the area. We recommend that you refer to the maps as you read through this plan.

# A Plan for Action

At the time the *Calumet Area Land Use Plan* was adopted in February 2002, approximately 1,000 acres of land designated for open space preservation were privately owned. Since that time over 300 acres have been acquired by the City of Chicago.

The lands the City acquires will be transferred to the State, Forest Preserve or Park District in the future. In 2001, the City and the IDNR entered into an intergovernmental agreement that detailed how they would move forward to implement the Reserve. The City would take the lead in acquiring the land and addressing environmental issues prior to transfer to the IDNR. In 2005 the City and the FPDCC entered into a similar intergovernmental agreement for lands along the Grand and Little Calumet rivers.

Since many of the lands are to be improved for wildlife habitat, the land will have to be safe for creatures that make the Reserve their home. The environmental risks for humans are well documented and standards exist for how to make environmentally degraded land safe based on how humans will use a site. The same is not true for birds, butterflies, squirrels, fish, fox, simply because each creature is different. To address that issue DOE initiated discussions with experts in the field to establish "ecotox" standards for the lands of Calumet. Once the City and State agree upon the standards, work can begin to address cleanup.

Fortunately, one of the first parcels acquired does not pose significant ecotox issues. The 100 acre Hegewisch Marsh, a nesting site for Illinois endangered yellow-headed blackbirds, was acquired by the City in 2003 with funds from the Illinois Department of Natural Resources, the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration.

It is cooperative efforts such as these that will make the Calumet Open Space Reserve a reality. The following pages provide a blueprint for the Reserve.



Cluster Site

# Landfills

There are about 850 acres of landfills and 600 acres of public waste treatment facilities within the Calumet Open Space Reserve. Almost all of these sites are on former wetlands because the same natural qualities that make a wetland wet—a thick clay bottom—also make it an ideal site for a landfill. Some landfills have been properly constructed and managed, others have not.

At the 450-acre CID Recycling and Disposal Facility owned by Waste Management of Illinois, the base and sides of the landfill were properly constructed by draining the wetland, digging up 3–6 feet of the top layer of clay on the site, re-compacting that clay and then laying it over the remaining natural clay and along the sides of the site. Rainwater that falls on a landfill and runs through it is turned into a liquid substance called leachate. At CID, four landfill cells constructed per state permit over a 30-year period not only have the compacted clay base and walls but also were constructed with leachate collection systems, liners and monitoring wells that reach the bedrock under the clay. The site is managed to meet today's state landfill standards and over the last 20 years no data from the monitoring wells has indicated that leachate is leaving the site.

In contrast, the Cluster Site, a former wetland which is part of a 270-acre grouping of six landfill and waste disposal sites, was used for illegal dumping for 30 years. This area includes Alburn Incinerator and U.S. Drum. Since most of the site was not permitted by the State, the usual public safety and environmental standards were not put in place when the land filling or dumping began. Ground and surface water are contaminated. The first priority is to prevent contaminated waters from running off-site and degrading the adjacent wetlands and natural areas.



Van Vlissingen Prairie

# **Calumet Prairie Unit**

Nestled between a residential neighborhood and a railroad yard, the Van Vlissingen sites remind one of the mid-western prairie. Although much of the land has been disturbed several endangered plant species are found at the site.

#### VAN VLISSINGEN PRAIRIE, WETLANDS AND WOODS

#### Size: 131.6 acres

Current Owner: City of Chicago and Private

*Site Description and Natural Quality:* Blue flag irises, swamp milkweed, and blazing stars bloom amidst prairie grasses at Van Vlissingen Prairie. The prairie also provides significant habitat for birds, including American bitterns and Wilson's phalaropes.

*Environmental Issues:* This site was once the scene of extensive illegal dumping of construction material, but most of the debris was cleaned up by Belt Railway, the previous owner. Throughout the site there is a sandy, bluish-green fill material (slag-like residue left from the rinsing of steel mill equipment); it gives the soil a slightly elevated pH factor.

*Land and Water Restoration:* The City of Chicago has committed \$1 million to create six acres of wet prairie, and to improve 30 acres of marsh and 29 acres of wet prairie that are already in place but degraded.

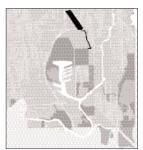
*Recreation and Amenities:* Hiking, bird watching and general nature observation are the main recreational activities anticipated. Five schools are within walking distance of the prairie and woods, giving the area potential to be used as a superb outdoor learning laboratory.

#### VAN VLISSINGEN TRAIL

*Size:* Approximately one mile long, 15 acres *Current Owner:* Private

*Site Description and Natural Quality:* A thirty to fifty foot strip of land along the east side of this parcel should be reserved for development of a multi-use trail that would connect Van Vlissingen Prairie at the north to Big Marsh to the south and to buffer the residential area from future development of the rest of the site.

*Environmental Issues:* No information available. *Land and Water Restoration:* A path would need to be constructed. *Recreation and Amenities:* Multi-use trail.





Big Marsh



# **Calumet Wetlands Unit**

Located in the geographic center of the Calumet Open Space Reserve, the Calumet Wetlands Unit contains a rookery for black-crowned night herons and wetland habitat with high potential for ecological restoration. Alongside the bird and wetland habitat are landfills known as the Cluster Site.

#### BIG MARSH

*Size:* 297.6 acres, with 87 acres of open water *Current Owner:* Private

*Site Description and Natural Quality:* Big Marsh is the largest individual wetland in the Calumet Open Space Reserve. The water is shallow, with an average depth of two feet. A great abundance of herons, egrets and other wetland birds find the food they need to thrive. For about 15 years, black-crowned night herons nested in Big Marsh every summer. But in 1999, blocked culverts forced the water level so high that the herons nesting in common reed (phragmites) were flooded out, and the herons relocated themselves to Indian Ridge Marsh.

*Environmental Issues:* The Cluster Site is a potential source of contaminated water entering Big Marsh. Pollutants have left isolated pools of alkaline water, which makes it difficult for fish and sensitive aquatic plants to survive. Slag is present and other residual contamination from historic industrial operations on the site may also be present. Dramatically fluctuating water levels because of arbitrary artificial changes—such as the blocked culverts—are also a problem.

Land and Water Restoration: Once the Cluster Site contamination is addressed, Big Marsh is an excellent candidate for ecological restoration work, including the selective removal of slag, grade alterations to improve hydrology, control of invasive plants like purple loosestrife, and the planting of native grasses and flowers.

*Recreation and Amenities:* Hiking and biking trails, a canoe launch and a small parking area could be created.



Deadstick Pond

#### DEADSTICK POND

#### Size: 44.3 acres

*Current Owner:* Metropolitan Water Reclamation District of Greater Chicago (MWRD)

*Site Description and Natural Quality:* Deadstick Pond has open water surrounded by wetlands. It is an outstanding location for bird watching and already attracts birders from throughout the region to see the profusion of waterfowl and rare birds. Its shallow waters provide excellent habitat for long-legged wading birds. The pied-billed grebe and common moorhen, both threatened species in the state of Illinois, nest here. Yellowheaded blackbirds, a species endangered in Illinois, also nest at the site.

Environmental Issues: No information available.

*Land and Water Restoration:* Water quality could be improved by controlling the runoff entering Deadstick Pond. Other work should include improving overall hydrology, removing invasive plants, and planting native wetland species.

Recreation and Amenities: Visual access for wildlife observation could be improved.



MWRD SEPA Facility

### METROPOLITAN WATER RECLAMATION DISTRICT RIVER EDGE AND SIDESTREAM ELEVATED POOL AERATION (SEPA) FACILITY

Size: River Edge, 12 acres, SEPA facility, 17 acres

*Current Owner:* Metropolitan Water Reclamation District of Greater Chicago (MWRD)

*Site Description and Natural Quality:* This one-mile section of the north bank of the Calumet River is located between Stony Island and Torrence avenues. The strip is 125 feet wide. It is nicely landscaped and well maintained, and provides an attractive buffer for the river, separating it visually from the biosolids drying fields to the north. The river itself is the main draw for wildlife but the accessibility of the riverbanks also makes it attractive to people for recreational uses. The SEPA facility is located east of the Norfolk & Southern Railroad bridge, on the same side of the river. The SEPA facility increases the amount of dissolved oxygen in the river by pumping water up to a holding pool and cascading it back down to the river through a series of waterfalls. This process is one of the reasons water quality in the Calumet River and Lake Calumet has improved in recent years.

Environmental Issues: No information available.

Land and Water Restoration: Gradually the riverbank landscaping should be altered to utilize more native grasses and flowers that provide food and shelter for wildlife. Plants and natural materials could also be incorporated into a riverbank stabilization project that is needed here to prevent erosion.

*Recreation and Amenities:* Anglers fish from the banks. Public access could be improved by creating a small parking area at the end of Stony Island Avenue and establishing a path along the riverbank.



MWRD River Edge

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Indian Ridge Marsh

#### INDIAN RIDGE MARSH

*Size:* 152.8 acres, bisected by 122nd into Indian Ridge Marsh North (113.9 acres) and Indian Ridge South (38.9 acres)

Current Owner: City of Chicago and private

*Site Description and Natural Quality:* Though the ecological quality is degraded, Indian Ridge Marsh contains approximately 100 acres of wetlands, 30 acres of open water and 25 acres of slightly higher ground with plant communities favoring drier conditions. The marsh provides excellent habitat for wading birds and it has the largest nesting area for black-crowned night herons in the Upper Midwest. The black-crowned night heron is an endangered species in Illinois and in many other states. In 1999, ornithologists counted 808 black-crowned night herons using the rookery as home base.

*Environmental Issues:* Ground and surface water entering the marsh from the Cluster Site is contaminated. Much of Indian Ridge Marsh has been filled with slag and dredging spoil from the Calumet River.

Land and Water Restoration: First priority is controlling contaminated waters entering the marsh. Researching and improving the hydrology of the site is also critical. Culverts should be maintained and ecologically appropriate water control structures installed. Slag should be removed where it is feasible and necessary. Invasive plant species should be controlled, and native marsh and prairie species replanted.

*Recreation and Amenities:* A small parking lot and a trailhead could be established for visitors. A bicycle trail, hiking trails and wildlife observation areas could be created in such a way that birds could be viewed without being disturbed.

HERON POND

Size: 35.7 acres

Current Owner: City of Chicago and private

*Site Description and Natural Quality:* Heron Pond's value lies primarily in its use by wading birds and waterfowl. Yellow-headed blackbirds and black-crowned night herons are known to use the property at Heron Pond. The site has been used for fishing and trap shooting. Heron Pond is adjacent to the fields used by the MWRD to dry biosolids.

*Environmental Issues:* The gun club operations created an artificial mound in the water. Also, lead shot and lead paint from the skeet targets may need to be removed. Cluster Site contamination may also be an issue.

*Land and Water Restoration:* Understanding and then appropriately maintaining the hydrology of Heron Pond is critical. A water control structure should be installed, invasive plant species contained, and new plantings of native species should be established.

**Recreation and Amenities:** If the lead problem is eliminated, Southeast Sportsmen's Club activities could continue. Biking, hiking and bird watching are recreational uses anticipated here. Heron Pond can be connected to the Calumet River edge, Deadstick Pond, the Sidestream Elevated Pool Aeration (SEPA) facility, and Indian Ridge Marsh South by incorporating a trail between the Norfolk & Southern Railroad tracks and the MWRD biosolids drying facility.

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Hegewisch Marsh



# **Little Calumet River Unit**

The Little Calumet River curves around this unit of the Calumet Open Space Reserve, bordering Hegewisch Marsh, O'Brien Lock Marsh, Beaubien Woods Forest Preserve, and over 570 acres of landfills. Several smaller sites are found along the river's edge to the west.

# HEGEWISCH MARSH

Size: 100.5 acres

Current Owner: City of Chicago

*Site Description and Natural Quality:* The marsh has good water quality capable of supporting aquatic life. The area also includes open water and higher ground with meadows and cottonwoods. The marsh is a nesting site for Illinois endangered yellow-headed blackbirds. Five pairs raised their young in Hegewisch Marsh in 1999. It's also a nesting site for the threatened pied-billed grebes and common moorhen. Along the southern boundary of the 100-acre parcel owned by the City are two parcels of land that are similar in character to Hegewisch Marsh. The 12.7-acre parcel along the river is owned by the MWRD. The other 17.8-acre parcel is owned by a railroad. Either parcel would be a good location for the proposed Ford Calumet Environmental Center and the City is discussing acquisition options with both owners.

*Environmental Issues*: Prior to acquiring the site, the City completed its environmental due diligence and concluded that the site posed no threat to human health.

*Land and Water Restoration:* Changing the character of the meadow from Eurasian plants to native plants would improve biodiversity and help control invasive plants. Ecologically appropriate engineering techniques could be used to stabilize the riverbank and prevent erosion. Fish populations could be improved by nurturing aquatic vegetation and by installing obstacles fish can use for shelter.

**Recreation and Amenities:** Last year DOE announced the winner of the international design competition for the Ford Calumet Environmental Center, which will "serve as a teaching tool between nature and industry and between architecture and the environment." Facilities and trails associated with the center could be created in a way that avoids disturbance to sensitive wetland species of Hegewisch Marsh. Hiking trails could be incorporated along with wildlife observation areas.



O'Brien Lock and Dam

#### THOMAS J. O'BRIEN LOCK

Size: 15.6 acres

Current Owner: U.S. Army Corps of Engineers

*Site Description and Natural Quality:* The O'Brien Lock and Dam, completed in 1960 by the U.S. Army Corps of Engineers, directs the Little Calumet River toward the Illinois River and away from its original flow to Lake Michigan.

Environmental Issues: No information available.

Land and Water Restoration: No recommendations at this point.

*Recreation and Amenities:* The O'Brien Lock has the only existing visitor center and one of the few public restrooms in the Calumet Open Space Reserve. These facilities were built to allow the public to view the lock activities and are important visitor amenities. However, since 9/11 public access has been restricted.

#### O'BRIEN LOCK MARSH AND WHITFORD POND

#### Size: 94.3 acres

Current Owner: Metropolitan Water Reclamation District of Greater Chicago (MWRD)

*Site Description and Natural Quality:* O'Brien Lock Marsh is located adjacent to O'Brien Lock. It has 11 acres of open water surrounded mostly by common reed, and it provides good habitat for waterfowl. The 27-acre Whitford Pond is difficult to reach, as it is surrounded by O'Brien Marsh to the north, the Little Calumet to the east, and landfills on the south and west sides.

*Environmental Issues:* As part of MWRD's deep tunnel project large amounts of limestone spoil—a byproduct of the digging operations—have been stockpiled here but are slowly being removed.

O'Brien Lock Marsh



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Beaubien Woods

*Land and Water Restoration:* A pumping station and reservoir are planned for the site but may not be necessary.

*Recreation and Amenities:* O'Brien Lock Marsh is already popular for bird watching. Public access cannot be granted at this time. The MWRD needs to determine if the land will be needed for corporate purposes.

#### BEAUBIEN WOODS AND BEAUBIEN WOODS EXPANSION

*Size*: 251.2-acre Beaubien Woods, 16.1-acre River Expansion and 7.6 West Expansion *Current Owner:* Forest Preserve District of Cook County; various private owners

*Site Description and Natural Quality:* Beaubien Woods is a Cook County forest preserve with second-growth woods, meadows, a 22-acre lake, and excellent access to the Little Calumet River. *Environmental Issues:* No information available.

*Land and Water Restoration:* Woodlands are currently degraded by trash and invasive plants, both of which should be removed. Native woodland wildflowers and other understory plants could be planted. Riverbanks could be stabilized to prevent erosion.

*Recreation and Amenities:* It is the river that receives the greatest use, mostly by anglers. A boat launch on the river provides access for motorboats. The lake is popular for fishing. Kensington Bikeway, a potential regional trail, could run through Beaubien Woods and connect to O'Brien Lock & Dam and Burnham Prairie. Some footpaths exist already; a better system of marked hiking trails within the preserve would be an improvement.

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#### RIVERDALE WETLANDS

Riverdale Marsh

#### Size: 23.6 acres

Current Owner: Private

*Site Description and Natural Quality:* Riverdale Wetlands is located along the southern shore of the Little Calumet River between an industrial site on the west and a private boat and gun club to the east. Directly across the river is the undeveloped river edge that connects to Beaubien Woods Forest Preserve. The wetlands include shallow water areas where the dominant emergent vegetation is cattails. Second growth bottomland hardwoods are found to the east and north of the site.

Environmental Issues: No information available.

*Land and Water Restoration:* It appears that there has been some attempt to fill in the wetlands in the past.

**Recreation and Amenities:** The close proximity of this site to the private boat and gun club may offer an opportunity to form a partnership with the club for maintenance and management of the site. Alternatively, the site could be managed solely for habitat with access from the river for boats and canoes.

# RIVERDALE WOODS, RIVERDALE BEND AND EGGLESTON TRIANGLE

Size: 36.6 acres, 4.2 acres and 3 acres

Current Owner: Private, MWRD

*Site Description and Natural Quality:* Riverdale Woods is on the north shore of the Little Calumet River. Much of it is relatively open and free from the dense brush that mars the under story of so many woodlands in the Chicago region. The U.S. Fish and Wildlife Service confirmed that a pair of bald eagles had used the site for nesting during the summers of 2004 and 2005. The site could be connected to Whistler Woods Forest Preserve by the Major Taylor Trail that runs along the western edge of the woods and crosses over the river. A small open parcel, called the Eggleston Triangle, abuts the Major Taylor Trail on the other side across from the woods. East of Riverdale Woods is an area referred to as Riverdale Bend, which includes the undeveloped land along the northern bank of the Little Calumet River. This land is owned by the MWRD and includes the 127th Street SEPA station, where the water in the Little Calumet undergoes aeration to improve its oxygen content and quality.

*Environmental Issues:* No information available.

*Land and Water Restoration:* Purple loosestrife and other non-native invasive plants are prevalent in the wetlands of Riverdale Woods and need to be managed.

**Recreation and Amenities:** The Major Taylor Trail provides a critical bicycle and pedestrian link between these lands in the City of Chicago and the Whistler Woods Forest Preserve in suburban Riverdale. The Eggleston Triangle and the western edge of Riverdale Woods could be developed and managed as a green gateway between the two communities.



Wolf Lake



# Wolf Lake Unit

The majority of the land in the Wolf Lake Unit is already owned and managed for conservation and recreation by the Illinois Department of Natural Resources. The unit contains Wolf Lake itself, a vast stretch of open water popular for fishing. It also includes Hyde Lake Wetlands, Indian Creek, Eggers Woods Forest Preserve, and the already-operational Burnham Greenway hiking and biking trail.

#### WILLIAM W. POWERS CONSERVATION AREA

#### Size: 604.5 acres

Current Owner: Illinois Department of Natural Resources

*Site Description and Natural Quality:* The 420-acre Wolf Lake comprises much of the site. Large numbers of mute swans have made their winter home at Wolf Lake for several years, and a few pairs have begun to stay through the summer to nest. Though the mute swans are not native, they are interesting to observe; they are so large that even drivers rushing past Wolf Lake on the Chicago Skyway take notice. So far the swans do not appear to have displaced other native birds that continue to be abundant at Wolf Lake. Wolf Lake's borders are all public land, both in Illinois and in Indiana.

*Environmental Issues*<sup>-</sup> Two industries discharge into the channel that flows into Wolf Lake. Hammond's sanitary district also discharges stormwater overflow into the lake.

Land and Water Restoration: As is true throughout the Calumet Open Space Reserve, replanting native plants would improve habitat. Acquiring the "Wolf Lake Connectors," an undeveloped 22.6 acres bordered by 135th Street, Avenue K and a mobile home park, would connect public lands to the south—Powderhorn Lake and Prairie—and the William Powers Conservation Area. The City of Hammond plans to restore a wetland along Wolf Lake's north shore and is attempting to improve water circulation throughout the lake; circulation is hampered by dikes and the Chicago Skyway.

**Recreation and Amenities:** About six miles of shoreline are available for bank fishing. Species caught include largemouth bass, northern pike, bluegill, and others. In fall, waterfowl hunting is permitted and, in winter, ice fishing. Hiking, non-motorized boating, bird watching, and biking along the Burnham Greenway at the western border of the site are all currently available.



Wolf Lake Connector

#### EGGERS WOODS

Size: 246.1 acres

Current Owner: Forest Preserve District of Cook County

*Site Description and Natural Quality:* On the north border of Wolf Lake lies Eggers Woods, a Cook County forest preserve. When combined with the contiguous 604-acre William Powers Conservation Area, this is the largest block of publicly protected open space currently within the Calumet Open Space Reserve. It provides significant habitat for birds and the wetlands on the property support seven or eight breeding pairs of yellow-headed blackbirds. Eggers Woods' wood-lands, savannas and meadows are significant additions to the diversity of natural communities within the Reserve. The savannas are among the highest quality natural habitat remnants in the area. The City of Chicago acquired over three acres of land to the west of Eggers Woods in 2001 through the tax delinquency process. The land contains a degraded wetland and is separated from Eggers Woods by utility rights-of-way, but the land could be used to buffer the Forest Preserves holdings.

Environmental Issues: No information available.

*Land and Water Restoration:* Control of invasive species and planting of natives would improve the habitat. More study is needed on the nesting needs of yellow-headed blackbirds so the wetland can be improved to bolster their population, which is declining within the Calumet Open Space Reserve. Rehabilitation of the City-owned wetland and landscape management of the right-of-way areas would provide a quality buffer for the larger habitat area.

*Recreation and Amenities:* Hiking, picnicking and nature observation are currently available.



Eggers Woods

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Indian Creek

# INDIAN CREEK

Size: 26.8 acres

Current Owner: CenterPoint Properties and other private owners.

*Site Description and Natural Quality:* Indian Creek stretches more than a mile from Wolf Lake to the Calumet River. The channel varies in width from 40 to 50 feet. The water can flow either toward the river or the lake, depending on current elevations of Lake Michigan and Wolf Lake. The creek is located within an area slated for industrial development. A lake sturgeon was reportedly caught in Indian Creek in the late 1990s. When the entire creek is improved, it could become the primary corridor of access for sturgeon to spawn in a restored Wolf Lake.

*Environmental Issues*: Indian Creek's water is affected by contamination on either side of the creek. Water is slightly alkaline.

*Land and Water Restoration:* Stream management experts from the U.S. Department of Agriculture Forest Service proposed reconfiguring Indian Creek with riffles, pools and meanders to support the plants, insects and fish that depend on these features for habitat. When CenterPoint Properties developed the new Ford campus along Indian Creek in 2003, the company mitigated for wetland loss by restoring the north-south leg of Indian Creek entering the Calumet River.

*Recreation and Amenities:* A bike trail along the north-south leg of Indian Creek is recommended. It would be a key component in a trail system connecting the Burnham Greenway and Wolf Lake to the Calumet River via the 126th Street Connector. If creek water quality is improved and access provided, fishing would be possible.



Burnham Greenway

#### BURNHAM GREENWAY

Size: Five miles long

Current Owner: Various public agencies

*Site Description and Natural Quality:* This trail provides bicyclists and hikers with access to Eggers Woods, Wolf Lake and Powderhorn Marsh & Prairie. The Burnham Greenway is a critical link to connect proposed trails in the Calumet area with the popular path along the Lake Michigan shoreline. The Burnham Greenway is also a component of the 500-mile Grand Illinois Trail that will loop around northern Illinois, providing a continuous trail to the Mississippi River. The segment from Indianapolis Boulevard to Avenue O is complete.

Environmental Issues: No information available.

Land and Water Restoration: Complete trail and make other trail connections. Recreation and Amenities: Burnham Greenway is a biking and hiking trail.

#### HYDE LAKE WETLANDS

#### Size: 28.1 acres

Current Owner: City of Chicago and private owners

*Site Description and Natural Quality:* Hyde Lake once occupied hundreds of acres. But over the course of several decades in the 20th century, slag was deposited in its waters. The lake, once large and pure, was gradually loaded with so much slag that all that remains today is 12 acres of degraded wetland. The existing marsh is heavily inundated with non-native purple loosestrife, an invasive weed, that is choking out most native species of wetland plants. On higher ground are fields with Eurasian grasses and small patches of land with native grasses.

# Environmental Issues: Slag is found throughout the area.

Land and Water Restoration: In a Supplemental Environment Project settlement between U.S. EPA and the Sherwin-Williams paint company, the company agreed to pay \$150,000 to help restore Hyde Lake Wetlands. Control of purple loosestrife and revegetating the marsh and fields with native plants is a high priority. Restoration began in 1999 with a controlled burn and the release of beetles that help control purple loosestrife. Removal of non-native shrubs began in 2001.

*Recreation and Amenities:* Hiking trails and wildlife observation areas have been designed.



West Shore



# Lake Calumet Unit

Lake Calumet is the defining geographical feature for the entire area encompassed within the Calumet Open Space Reserve. The region is often called simply "Lake Calumet." The Lake Calumet Unit includes the lake itself and its surrounding lands, including the Harborside International Golf Center.

#### LAKE CALUMET AND GULL ISLAND

Size: Open water and 3.9 acre island

Current Owner: Illinois International Port District owns Gull Island

*Site Description and Natural Quality:* Lake Calumet itself is the most significant ecological asset for this unit. Its large scale is an important ecological feature, and the waters support more than 20 species of fish. Ducks, geese and other birds can be found on the lake year-round. Illinois' largest nesting colony for ring-billed gulls is located on a dock behind an abandoned incinerator. In this area, called Gull Island, over 5,000 pairs of gulls have made nests and raised their young in recent years. Rare falcon-like seabirds called jaegers have occasionally been spotted harassing the gulls in an attempt to seize their eggs or young birds; the presence of the jaegers is an additional bonus for birders and for the biodiversity of the Reserve. The site's location has helped protect the gulls from disturbance. The Illinois International Port District has taken steps to protect Gull Island for the gulls.

Environmental Issues: No information available.

*Land and Water Restoration:* While industrial uses on the east and south portions of the lake will continue, conservation and shoreline enhancement should progress on the remainder of the lake. Protection of marshes and upland areas that flow into Lake Calumet would greatly improve water quality. Native landscaping along Interstate 94 could help filter runoff of water from the highway before it reaches the lake.

Recreation and Amenities: Fishing and bird watching are popular.

#### WEST SHORE OF LAKE CALUMET

#### Size: 90.9 acres

Current Owner: Illinois International Port District

*Site Description and Natural Quality:* The West Shore of Lake Calumet is particularly wild although the land consists mostly of fill. A line of trees buffers the site from the expressway to the west. Mud flats of the northern section and woods and meadows provide important habitat for birds. They are likely also to be good habitat for amphibians, reptiles and other species of wildlife.

*Environmental Issues:* This area was filled by the Port District with bricks, asphalt and other construction debris.

*Land and Water Restoration:* Upland areas should be restored with native vegetation and the shoreline contoured to allow plants to grow and to control erosion.

Recreation and Amenities: Hiking trails and wildlife observation areas could be established.



Calumet Gateway

#### CALUMET GATEWAY

#### Size: 89.9 acres

Current Owner: Illinois International Port District

*Site Description and Natural Quality:* Calumet Gateway could become a home base for tourists and other visitors to the Harborside International Golf Center and the Calumet Open Space Reserve. The site is visible and easily accessible from the Bishop Ford Expressway and it is close to the historic neighborhood of Pullman and the golf course.

Environmental Issues: This area was filled with bricks and other construction debris.

*Land and Water Restoration:* Because of the wildness of the adjacent West Shore special care should be given to landscaping with native plants and maintaining a natural character as much as possible, especially near the water's edge.

*Recreation and Amenities:* Any new development should provide public recreational facilities that buffer the nearby natural areas, support critical habitats, and provide access to Lake Calumet.

#### EAST SHORE OF LAKE CALUMET

#### Size: 38.8 acres

Current Owner: Illinois International Port District

*Site Description and Natural Quality:* The only pier in Lake Calumet that is completely devoid of industrial development is located here. Land is degraded with extensive growth of weedy trees and shrubs.

Environmental Issues: No information available.

*Land and Water Restoration:* Illinois International Port District has proposed uses for this land that include a golf course extension or boat storage. Alternatively, the land could be further isolated so that waterbirds might select the pier as a safe place to nest.

*Recreation and Amenities:* Any new development should provide public recreational facilities that buffer the nearby natural areas, support critical habitats, and provide access to Lake Calumet.



Harborside International Golf Center

#### HARBORSIDE INTERNATIONAL GOLF CENTER

#### Size: 442.2 acres

Current Owner: Illinois International Port District

*Site Description and Natural Quality:* Chicago's municipal solid waste, incinerator ash and wastewater sludge are buried beneath the greens of Harborside International Golf Center. Since 1996, the land has been home to a 36-hole golf course with bent grass tees, fairways and greens. The Scottish links design has made Harborside one of the most demanding and popular golf courses in the U.S. and demonstrates how a former landfill can be transformed and used to generate revenue.

Environmental Issues: No information available.

*Land and Water Restoration:* The Illinois International Port District is currently incorporating habitat enhancement principles developed by National Audubon in its landscape management activities.

Recreation and Amenities: Golfing is the main activity; no changes are anticipated.

### HARBORSIDE MARSH

#### Size: 140.2 acres

Current Owner: Illinois International Port District

*Site Description and Natural Quality:* Harborside Marsh is a portion of Lake Calumet that has been diked off from the larger part of the lake by a small berm. It consists of 135 acres of open water and some man-made wetlands along the shores. Nearly half of more than two miles of shoreline are adjacent to golf course greens, fairways and sand traps.

Environmental Issues: No information available.

*Land and Water Restoration:* Shoreline restoration is needed to slow erosion, and native species should be planted to improve habitat and hold soil. The 16-acre dike should be managed with the rest of the marsh.

Recreation and Amenities: Wildlife observation is the main recreational activity.

Harborside Marsh to the left, Harborside International Golf Center to the right





Powderhorn Lake

# **Grand Calumet River Unit**

The Grand Calumet River Unit contains the highest quality protected natural area in the Calumet Open Space Reserve. Because the unit is isolated further development of the Burnham Greenway and Kensington Bikeway is critical to link it with the rest of the reserve.

#### POWDERHORN LAKE AND PRAIRIE

#### Size: 185.9 acres

*Current Owner:* Forest Preserve District of Cook County

*Site Description and Natural Quality:* This Cook County forest preserve is an excellent remnant of the dune and swale topography that once characterized the southern shores of Lake Michigan. On its higher ridges are little bluestem and porcupine grass along with prickly pear cactus, sand milkweed and a brilliant yellow flower called hairy puccoon. In the lower swales are cordgrass, sedges and blue joint grass. These species are typical of high quality marshes and wet prairies. In some cases, cacti and cattails are only several paces apart as natural communities grade into one another along the slopes of the ridges. Blanding's turtles, listed as a threatened species in Illinois, still survive at Powderhorn Marsh and Prairie. Franklin's ground squirrels, which require grassland for habitat, can also be found here.

Environmental Issues: No information available.

*Land and Water Restoration:* Continuation of ecological restoration work is the highest priority. Stormwater runoff from adjoining land uses should be mitigated. Another high priority includes the acquisition of an additional 54 acres west of Powderhorn, where dune and swale topography continues and native plants survive.

*Recreation and Amenities:* Facilities existing at Powderhorn include a parking lot, boat launch and portable restrooms. Permanent restrooms and designated hiking trails would be appropriate improvements.



Powderhorn Prairie Expansion



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#### **BURNHAM PRAIRIE**

Burnham Prairie

*Size*: 82.3 acres were recently acquired and another 35 are in process of being acquired *Current Owner:* Forest Preserve District of Cook County; private

*Site Description and Natural Quality:* Burnham Prairie is a high quality prairie with diverse populations of plants, butterflies and other insects in what was widely considered one of the most important unprotected natural areas in Illinois. The 35-acre Burnham Prairie Addition will provide a buffer to the important natural areas. The 32-acre Cattail Marsh to the east is inaccessible to vehicular traffic. The site could be acquired upon completion of the Burnham Greenway which could provide access to the site.

Environmental Issues: No information available.

*Land and Water Restoration:* Active ecological restoration of Burnham Prairie is critical to improve the health of the existing natural community and to combat invasive plants. An environmental and ecological rehabilitation strategy would need to be developed for the 73 acres north of the prairie along the Grand Calumet River that contains slag.

**Recreation and Amenities:** Burnham Prairie will be used as a nature preserve with recreational activities limited to hiking, bird watching and other low-impact pursuits. In the recommended expansion site to the west, a canoe launch could be established. This location would provide paddlers a safe place to access the Little Calumet River by avoiding the O'Brien lock and the heavy industrial shipping of the Calumet River. A small parking lot could be built.

#### 134TH STREET MARSH

Size: 30.7 acres

Current Owner: Private

*Site Description and Natural Quality:* This marsh parcel could connect the William Powers Conservation Area with Powderhorn Lake and Prairie. The land and marsh are overgrown and degraded, but protecting it would create a wildlife corridor for passing from one portion of the Reserve to the next.

Environmental Issues: No information available.

*Land and Water Restoration:* Acquisition, then ecological management are the priorities. *Recreation and Amenities:* A bike trail could be constructed.

#### 134th Street Marsh



# Connections

Wandering through the Calumet Open Space Reserve will provide an opportunity different from many other habitat preserves. The journey between the large parcels will take the visitor through Chicago neighborhoods, across 19th century bridges and by state-of-the-art industry. The traveler will have the opportunity to stop at local restaurants, observe ocean-going vessels from around the world and remnants of Chicago's steel making heyday. A complex of bike trails, lanes and routes will be available for the explorers.

Three types of bikeways are used in Chicago:

- Trails—dedicated rights of way separated from the road for use by bicyclists, walkers, runners, skaters. Pavement, gravel, aggregate or other materials can be used for the trail.
- Bike Lanes in the Public Way—5–6 foot sections on each side of the street reserved for bicycle use. Special pavement marking and signs identify the lanes.
- Bike Routes—shared lanes of traffic for both cars and bicycles. Routes serve as connectors between trails and bike lanes and also provide directions to destinations with special signs.

The Connections Map shows existing trails, bike lanes and bike routes in and around the Calumet Open Space Reserve. The Calumet Bi-State Region map shows how those trails connect to areas beyond Chicago. There are two major trails on either side of the Reserve, the Burnham Greenway and the Major Taylor Trail. The Burnham Greenway lies to the east and connects Wolf Lake to Eggers Woods and will eventually link those sites to the lakefront path and south suburban forest preserves. The Major Taylor Trail lies to the west of the Reserve connecting forest preserves to the north and south. The right of way for both trails was purchased by the City of Chicago.

A number of north-south and east-west bike routes already exist in the Calumet area connecting neighborhoods to the Burnham and Major Taylor Trail, cultural facilities and public transit hubs.

With this existing bike path infrastructure in place, a series of facilities and routes is proposed for the Calumet Open Space Reserve. Outlined on the Proposed Bike Connections Map are the proposed routes with reference to the approved planning documents where detailed information can be found about them.

# **Calumet Open Space Reserve**

Produced by City of Chicago Department of Planning and Development 121 N. LaSalle Street, Room 1003 Chicago, IL 60602 (312) 744-1074 www.cityofchicago.org/dpd December, 2005

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*Notes:* This document is one of three pertaining to land use in the Calumet Region. Others published as part of this same planning effort include the *Calumet Area Land Use Plan* adopted by the Chicago Plan Commission on February 14, 2002 and the *Calumet Design Guidelines* adopted on March 11, 2004. Both documents are available by contacting the Department of Planning and Development.

For lands currently owned by the Chicago Park District, Forest Preserve District of Cook County and the Illinois Department of Natural Resources the officially designated site name is used. The official name is also used for the golf course owned by the Illinois International Port District. For all other sites the names are those commonly used by the local community or names assigned for identification purposes by the City of Chicago Department of Planning and Development.

The photographs that appear in this document were taken in 1996, 1997 and 2000. The earlier photos were commissioned by the Southeast Chicago Development Commission for a 1997 lecture and exhibit sponsored by the Graham Foundation entitled "The Lake Calumet Region: The Juxtaposition Between the Natural and Built Environment."