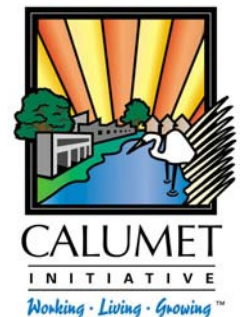


# The Calumet Initiative

Nicole Kamins  
Chicago Department of Environment

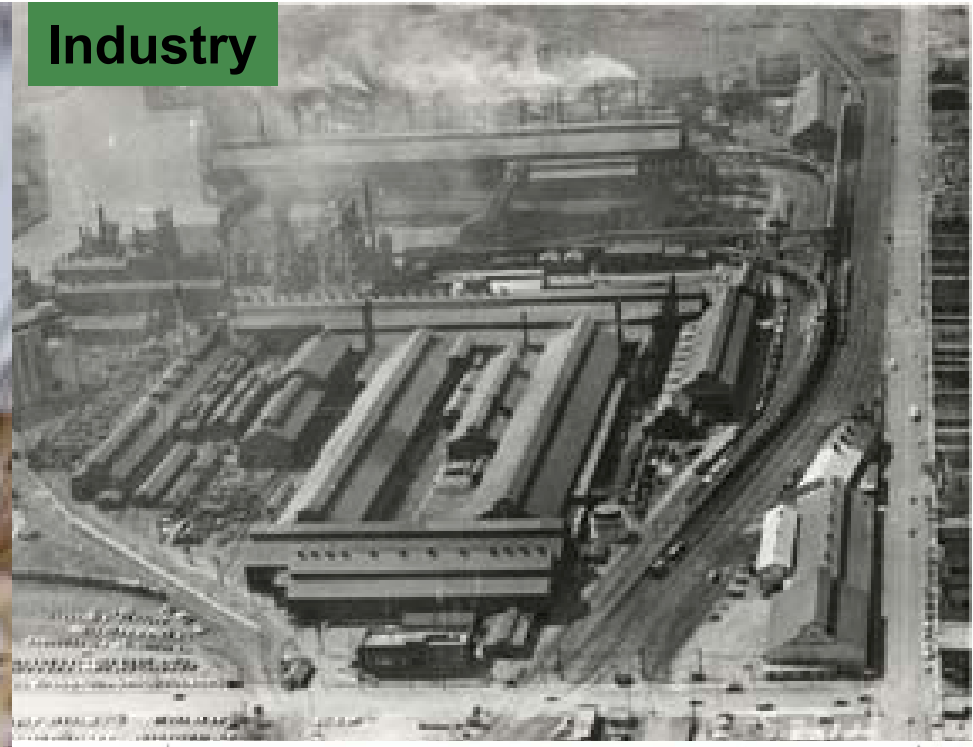
*Historic photos courtesy of Southeast  
Chicago Historical Society*



# Nature



# Industry



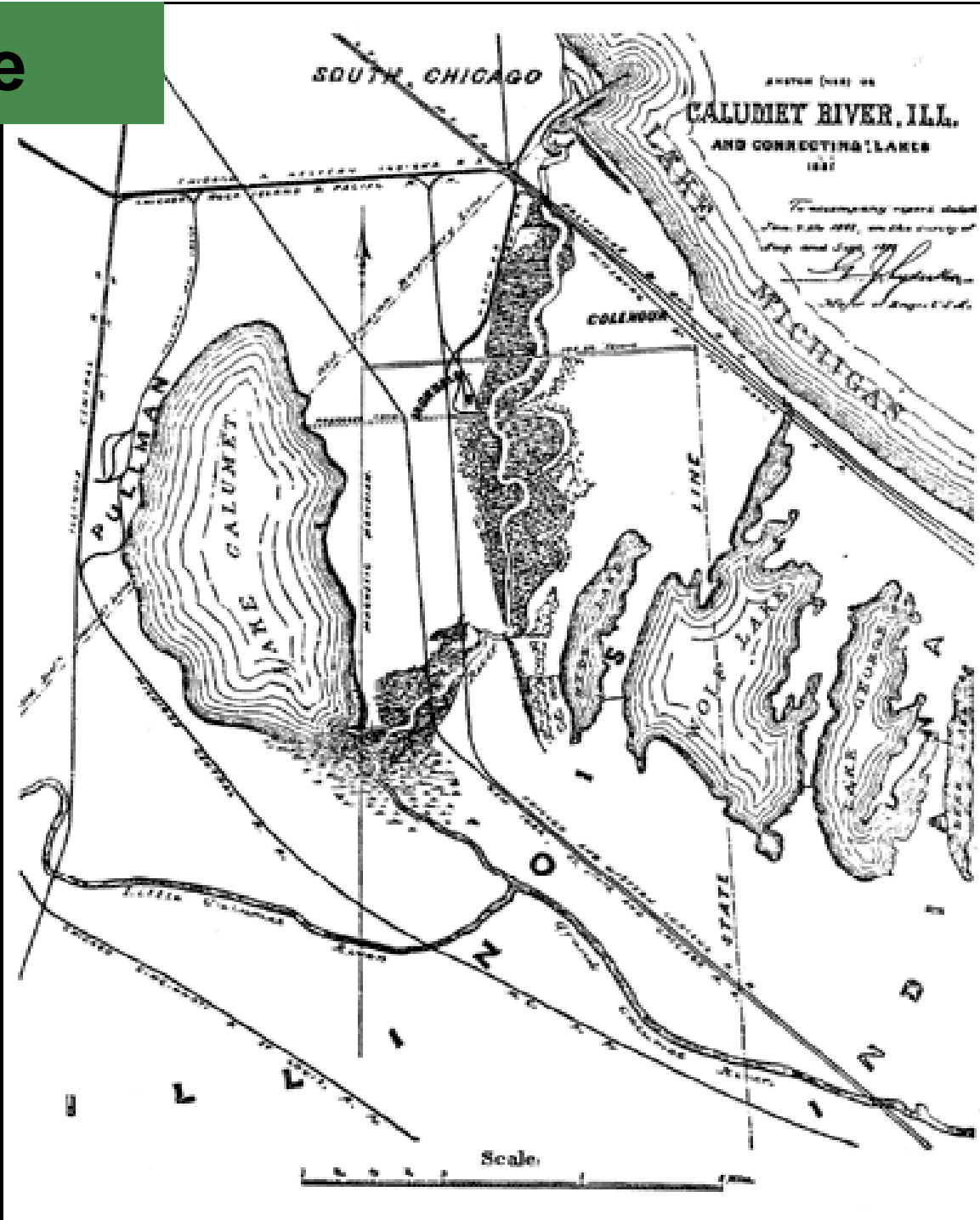
# Community



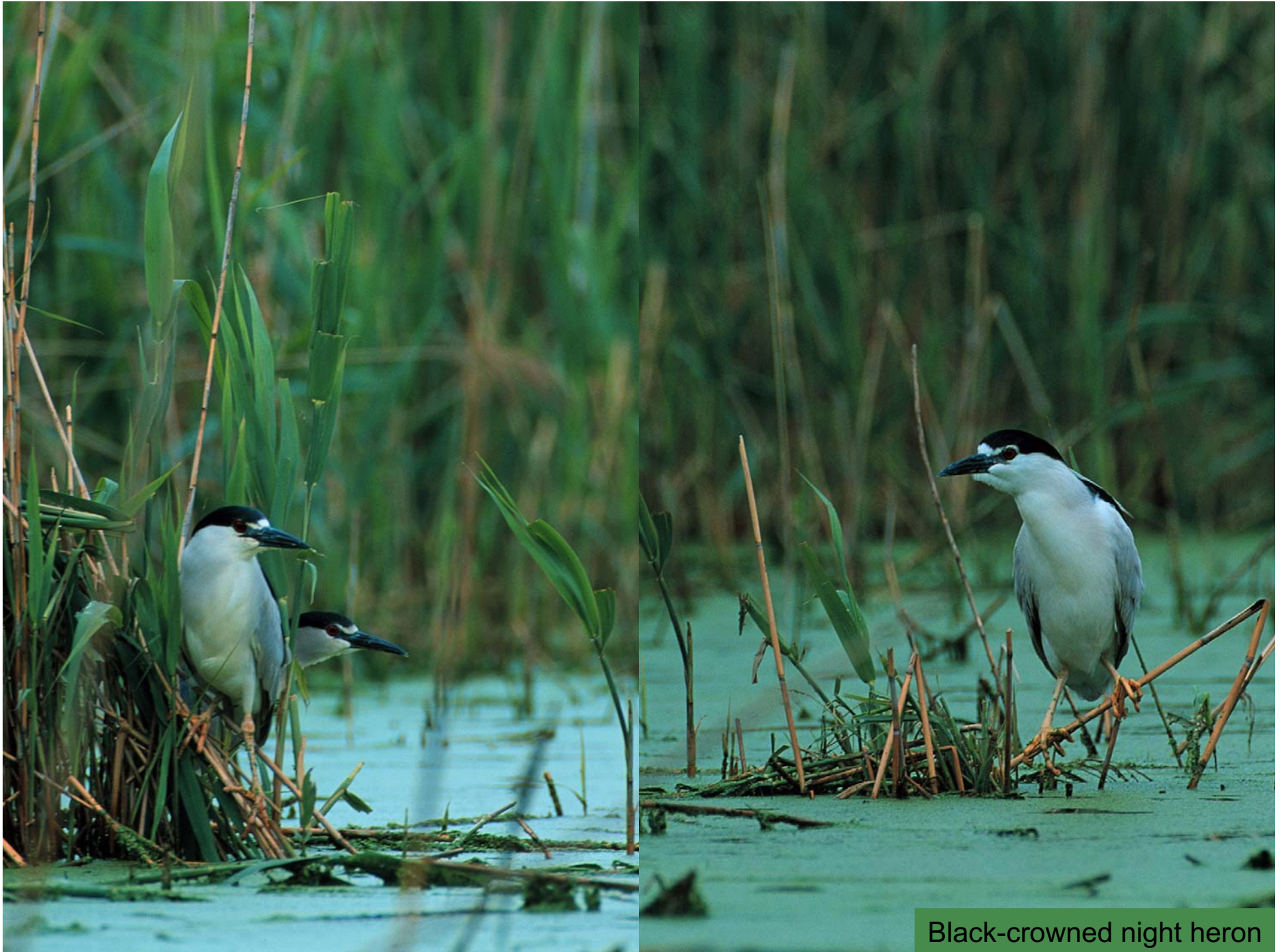


Photo By Marcin Gliszewski

# Nature



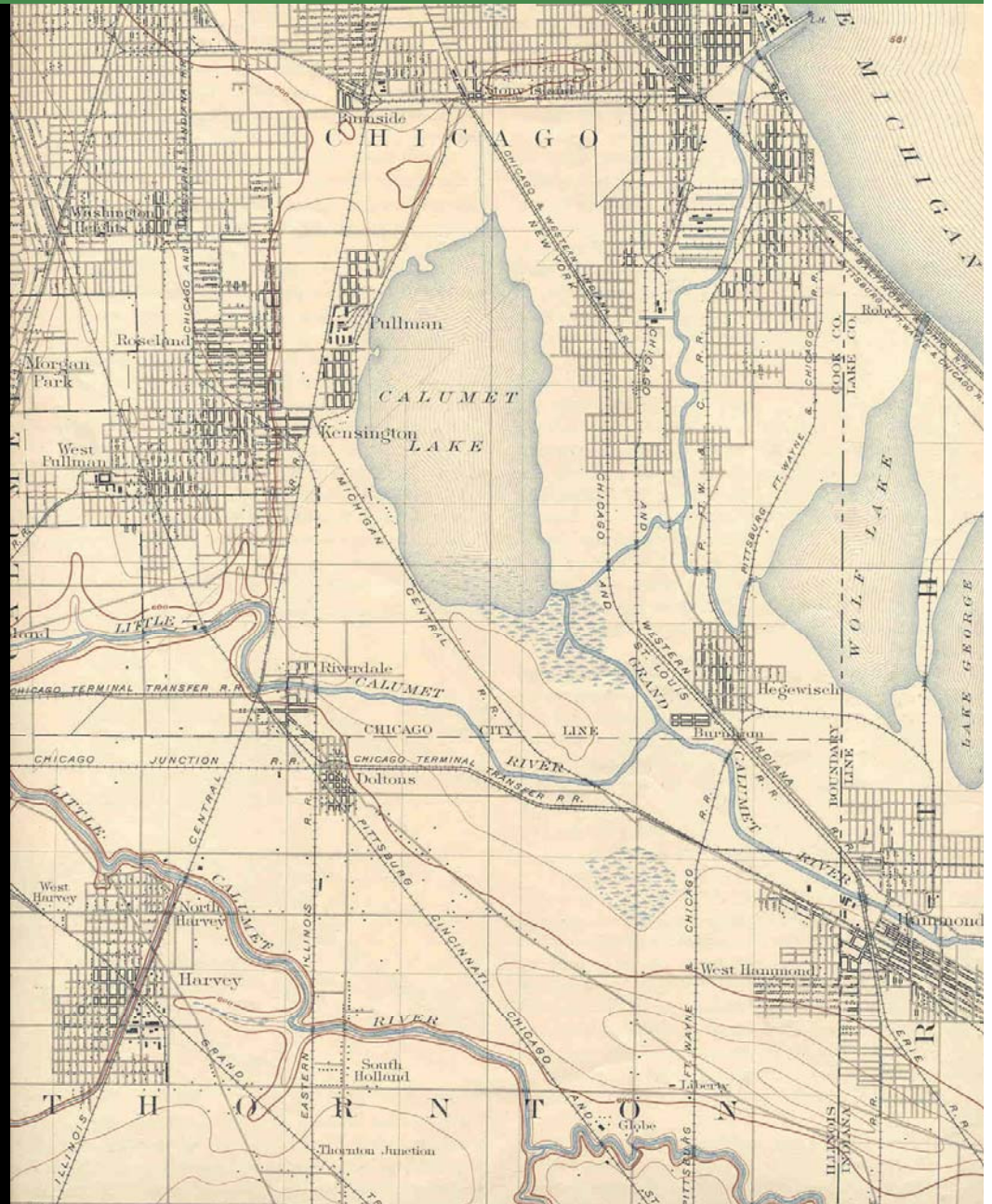




Black-crowned night heron

# Development of Southeast Side

- Lake Michigan
- Calumet River
- Railroad
- Natural Resources
- Wetland Filling



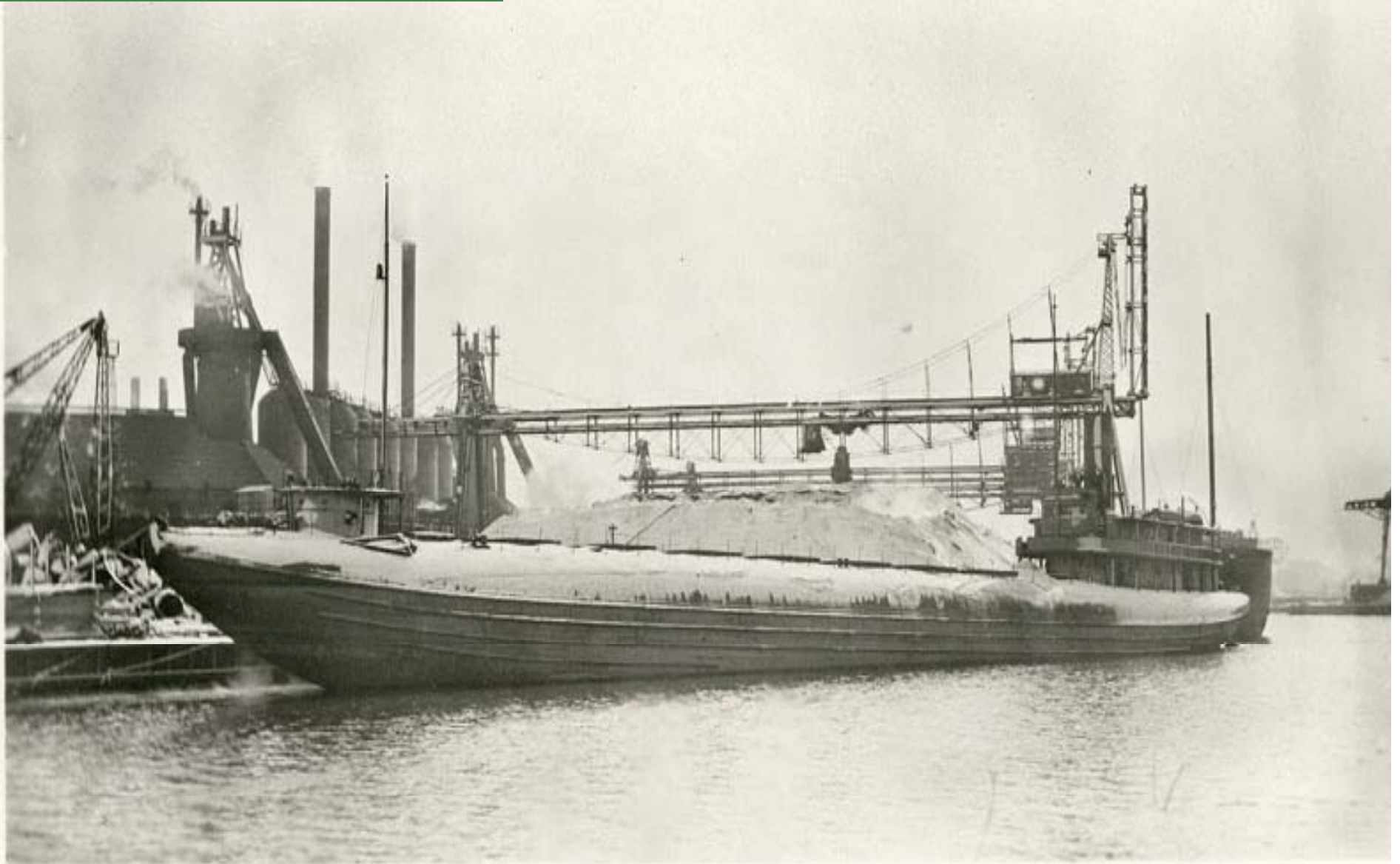
# Calumet River



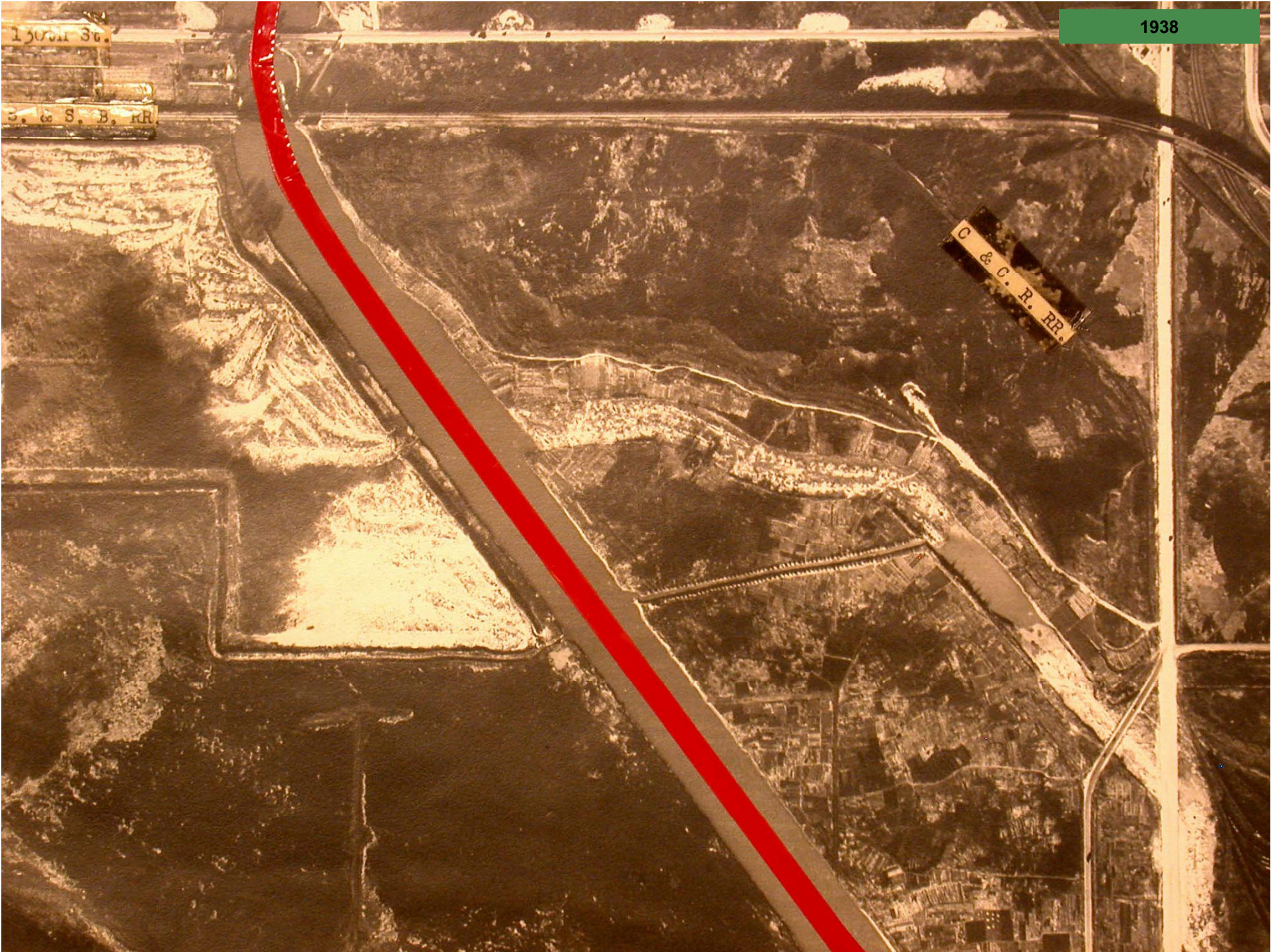
Ore boats, Rialto Grain Elevator (built c. 1902) and flour mill along Calumet River slip near 104<sup>th</sup> St. (c. 1915)



# Calumet River



Whaleback lake boat unloading  
at Federal Furnace (c. 1913)



# Lake Calumet

Brochure – Calumet Waterway Celebration (1935)



## Industries Located Near Lake Calumet

- 1—Illinois Steel Co.
- 2—Youngstown Sheet & Tube Co.
- 3—Material Service Corp. Dock
- 4—Great Lakes Dredge & Dock Co.
- 5—Dunham Towing Co. Tug Base
- 6—South Chicago Coal & Dock Co.
- 7—Construction Material Co. Dock
- 8—Calumet Ship & Dock Co. Yard
- 9—P. T. Elevators, cap. 4,000,000 bu.
- 10—Lake Sand Co.
- 11—John Mohr & Sons Steel Plant
- 12—Pollak Steel Co.
- 13—Norris Elevator, cap. 2,250,000 bu.
- 14—Commonwealth Edison Co.
- 15—Chicago Shipbuilding Co.
- 16—Calumet Elev., cap. 3,000,000 bu.
- 17—C. E. & Q. R. R. Dock House
- 18—J. Rosenbaum Elev., 2,200,000 bu.
- 19—American Sand & Gravel Co.
- 20—Ter. & Trans. Corp. Dock House
- 21—Rialto Elevator, 164th St.
- 22—Star & Crescent Milling Co.
- 23—Marblehead Lime Co.
- 24—Keystone Elev., cap. 4,500,000 bu.
- 25—Washburn-Crosby Flour Mill
- 26—C. E. I. & P. Ry. Dock House
- 27—Londale Elevator, cap. 900,000 bu.
- 28—Wisconsin Steel Co.
- 29—International Harvester Co.
- 30—Federal Furnace Co.
- 31—By-Products Coke Co.
- 32—Commonwealth Edison Co.
- 33—American Maltz Products Co.
- 34—Valley Mould & Iron Corp.
- 35—Interstate Iron & Steel Co.
- 36—General Chemical Co.
- 37—C. & N. W. Ry. Terminal Elev., 4,470,000 bu.
- 38—Ford Motor Co.
- 39—Ryan Car Co.
- 40—Western Steel Car & Foundry Co.
- 41—Acme Steel Co.
- 42—International Harvester Co.
- 43—Carter White Lead Works
- 44—Griffin Wheel Co.
- 45—Shearin-Williams Co.
- 46—Pullman Co.
- 47—Nickel Plate Yards
- 48—Burnside I. C. R. R. Shops
- 49—American Manganese Steel Co.
- 50—Zerzone Co.

THE STORY OF  
CHICAGO REGIONAL PORT DISTRICT  
PORT OF CHICAGO  
**LAKE CALUMET HARBOR**  
MID-AMERICA WATER-RAIL-TRUCK LINK WITH THE WORLD  
*"A City Within a City"*

Brochure (1961)

# Calumet River



Mouth of the Calumet River – Calumet Park, Youngstown Steel; bottom left is South Slip of US Steel (1960s)

# Railroads



Acme Steel, Riverdale  
Plymouth No. 3 Locomotive  
(late 1930s)

# Industry: Steel

1875  
to  
1992

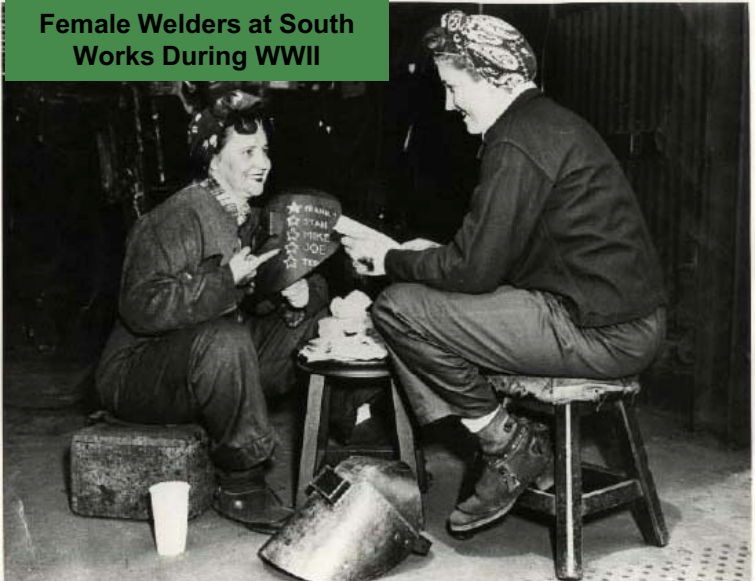


Acme Steel Coke Ovens

Republic Steel (built 1876)  
Avenue O & Calumet River



Female Welders at South  
Works During WWII



# Industry: Steel



Acme Steel

PUSHING COKE FROM AN OVEN

# Industry: Steel



Acme Steel – Riverdale  
Hot Metal Pour (late 1980s)



# Filling of Wetlands



# Filling of Wetlands



Chicago West Pullman & Southern  
Slag Train (January 1975)

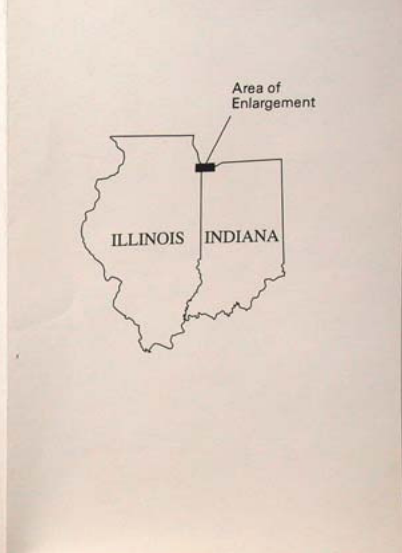
# Fill Materials of the Calumet Region



## EXPLANATION

### TYPE OF FILL DEPOSITS

- Industrial waste
- Natural material (includes sand and clay)
- Steel industry waste
- Dredging spoil
- Biological sludge
- Ash and cinders
- Construction debris
- Municipal solid waste



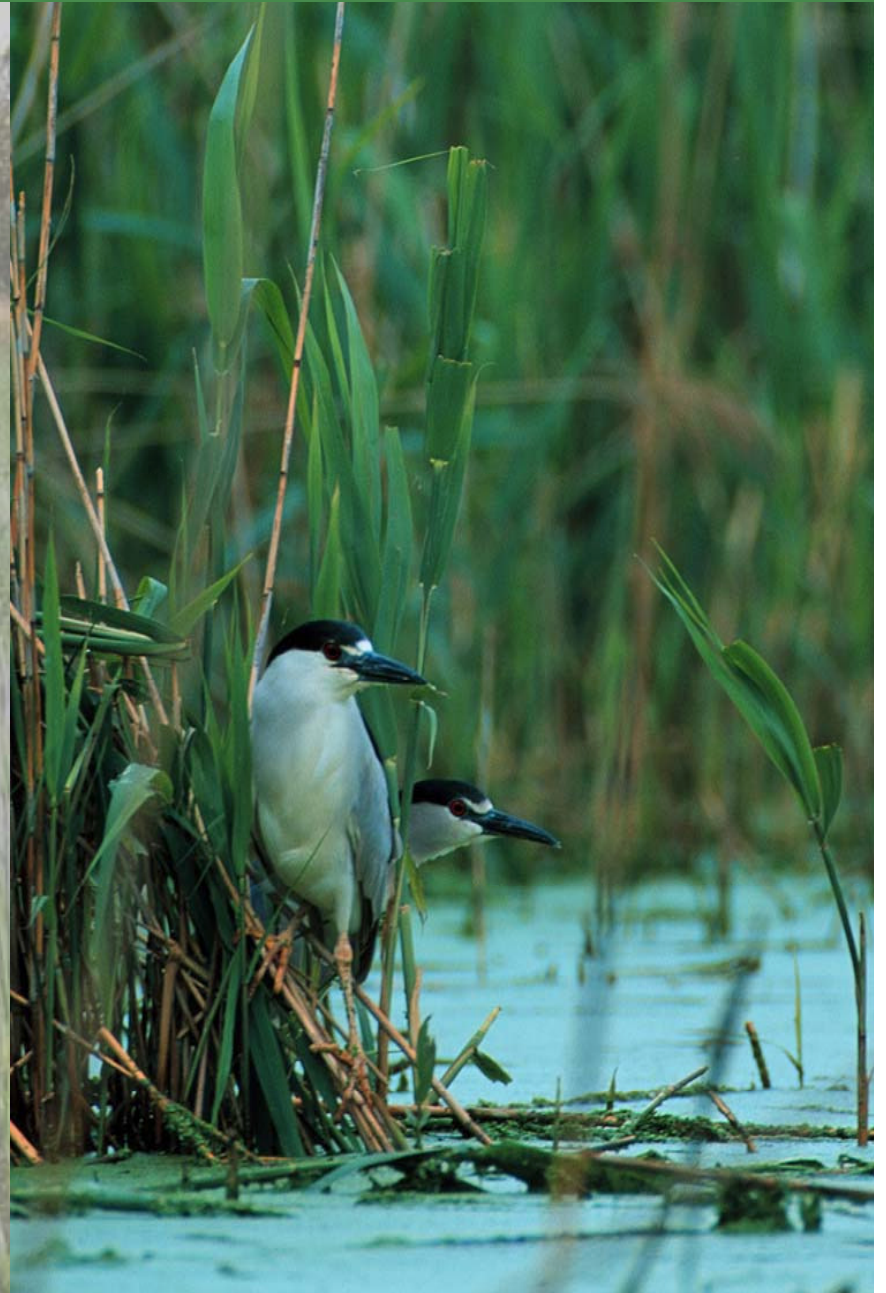
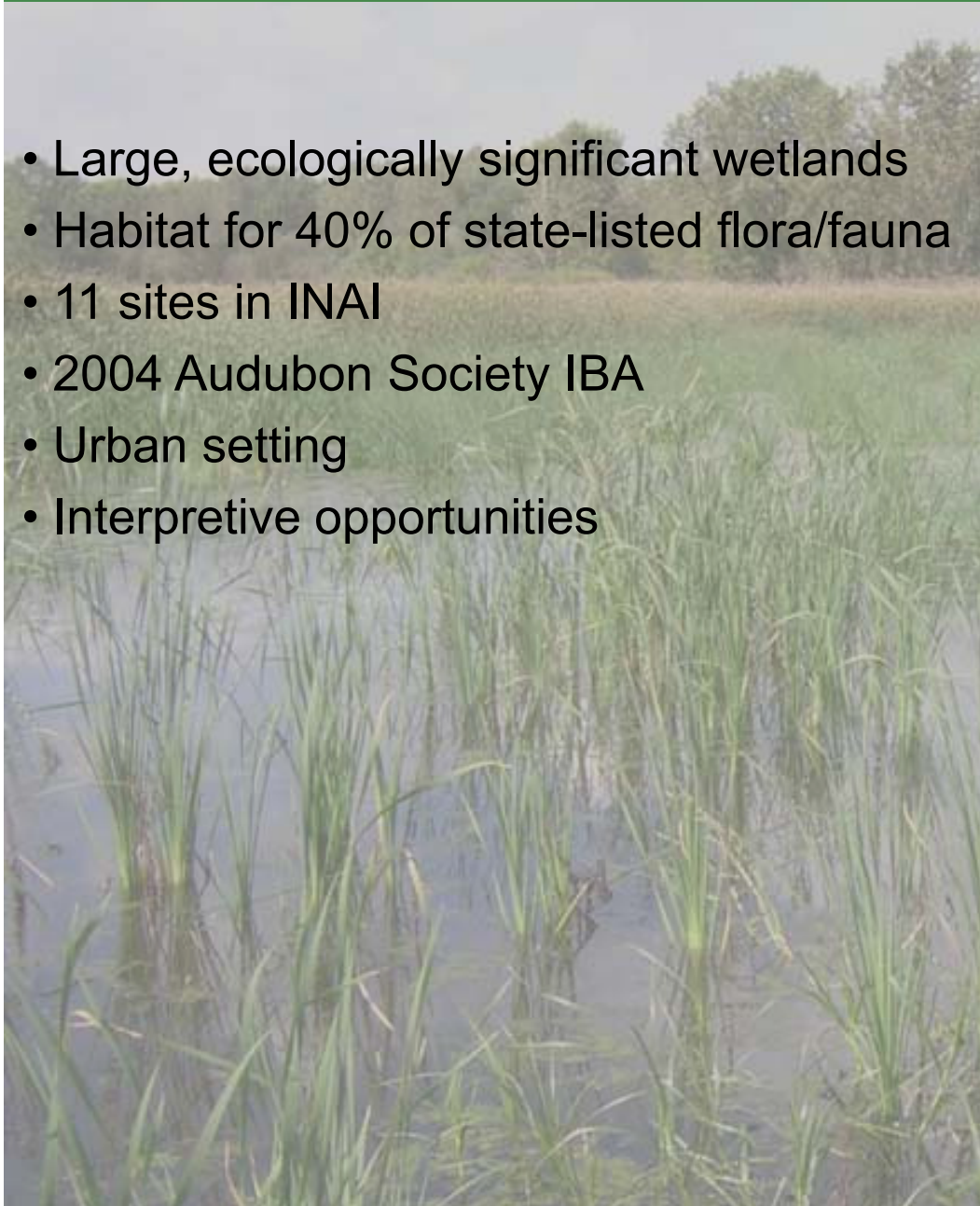
# Nature Today: Challenges



- Slag, Dredge Spoils
- Hydrology
- Contamination
- Invasive species
- Nuisance species
- Dumping, off-roading

# Nature Today: Opportunities

- Large, ecologically significant wetlands
- Habitat for 40% of state-listed flora/fauna
- 11 sites in INAI
- 2004 Audubon Society IBA
- Urban setting
- Interpretive opportunities



**No Small Plans**

# Calumet Open Space Reserve



# Calumet Initiative Partners

**ACADEMIA:** Chicago State University, DePaul University, Governor's State University, Illinois Institute of Technology, Loyola University, Michigan State University, Northwestern University, Notre Dame, Purdue University, University of Illinois at Chicago, University of Illinois Urbana Champaign, University of Michigan-Ann Arbor

**LOCAL AND STATE GOVERNMENT:** Chicago Department of Environment, Chicago Department of Planning and Development, Chicago Department of Business and Information Systems, Chicago Park District, Alderman John Pope (10<sup>th</sup> Ward, Chicago), Alderman Anthony Beale (9<sup>th</sup> Ward, Chicago), Alderman William Beavers (7<sup>th</sup> Ward, Chicago), City of Hammond, Indiana, Forest Preserve District of Cook County, Illinois Department of Natural Resources, Illinois Environmental Protection Agency, Illinois International Port District Authority, Illinois Natural History Survey, Illinois State Geological Survey, Illinois State Water Survey, Illinois Waste Management Research Center, Indiana Department of Environmental Quality, Indiana Department of Natural Resources, Metropolitan Water Reclamation District of Greater Chicago, Northeastern Illinois Planning Commission, Cook County Dept of Office Technology

**FEDERAL GOVERNMENT:** Illinois-Indiana Sea Grant; Urban Resources Partnership, US Army Corps of Engineers, US Department of Agriculture Forest Service North Central Research Station, US Environmental Protection Agency, US Fish and Wildlife Service, US Geological Survey, US National Park Service, US Natural Resources Conservation Service

**ENVIRONMENTAL ORGANIZATIONS AND MUSEUMS:** Bird Conservation Network, Brookfield Zoo, Chicago Academy of Sciences, Chicago Audubon Society, Chicago Ornithological Society, Chicago Wilderness, Field Museum of Natural History, Friends of the Chicago River, Grand Calumet Task Force, Illinois Audubon Society, National Audubon Society, Openlands Project, Shedd Aquarium

**LOCAL RESIDENT-LED ORGANIZATIONS:** Calumet Ecological Park Association, Calumet Heritage Partnership, Hammond Parks Foundation, Hegewisch Chamber of Commerce, Historic Pullman Foundation, Lake Calumet Ecosystem Partnership, Ridge Historical Society, Southeast Environmental Task Force, Wolf Lake Bi-State Gatherings

**INDUSTRY:** Acme Steel, Calumet Area Industrial Commission, Ford Motor Company, Southeast Chicago Development Commission, USA/Waste Management Corp

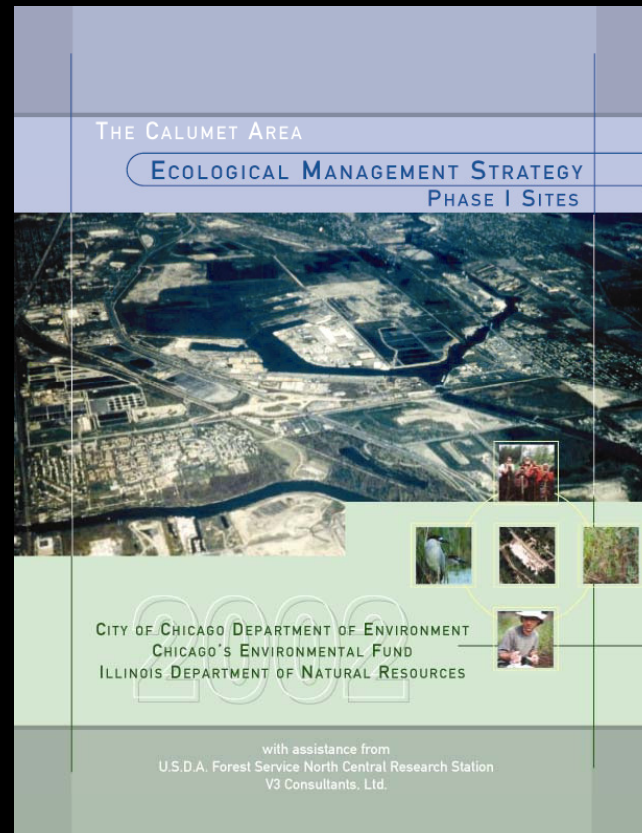
**CHICAGO AREA CONSULTING FIRMS:** V3 Consultants, Envirocom, Kudrna & Associates, TAMS Consultants, The Wetlands Initiative, Wolff Clements and Associates, Jacobs-Ryan Associates, Applied Ecological Services

**FOUNDATIONS:** Chicago's Environmental Fund, Gaylord and Dorothy Donnelley Foundation, Max McGraw Wildlife Foundation

**MISCELLANEOUS:** Institute of Nature and Culture, Nature, Polis and Ethics



# Calumet Area Ecological Management Strategy



Chicago Department of Environment  
Illinois Department of Natural Resources  
Chicago's Environmental Fund  
with assistance from  
USDA Forest Service North Central Research Station  
V3 Consultants and Jacobs/Ryan Associations

# Calumet Hydrologic Master Plan

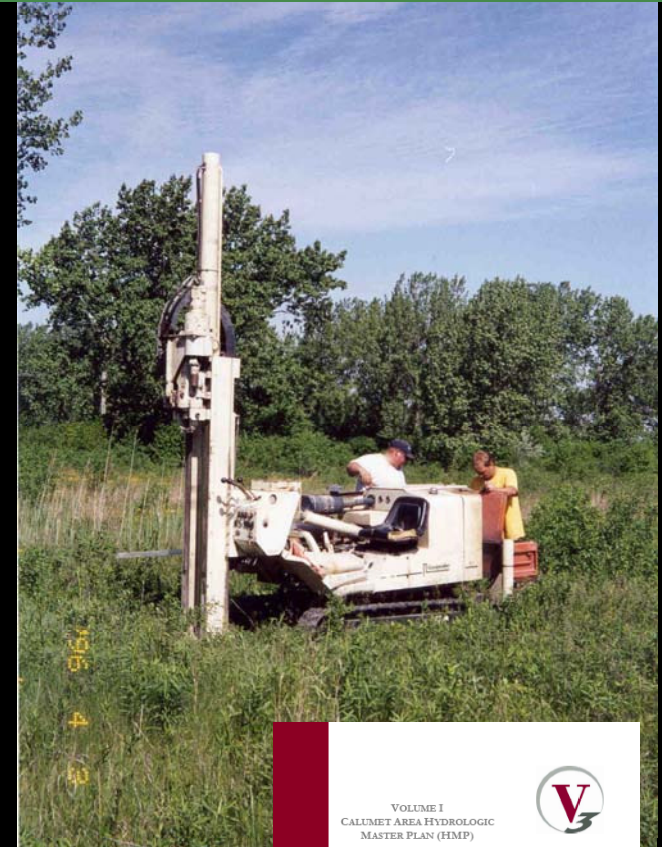
**Timeline:** Released September 2006

**Funding:** IDNR C2000 program, City of Chicago, Chicago Specialties Supplemental Environmental Project (SEP), US Dept of Housing and Urban Development

**Advisors:** George Roadcap (ISWS) and Michael Miller (ISGS)

**Sites:** Indian Ridge Marsh, Heron Pond, Deadstick Pond, Big Marsh, Lake Calumet, Conservation Area, Pullman Creek; later additions include Hegewisch Marsh and Van Vlissingen Prairie

**Goal:** To assess the hydrology of the region, connections between sites, status of water control structures, bathymetry of wetlands and topography of the area. To test general water quality at some sites (pH, DO, turbidity, etc.) Recommendations are provided.



VOLUME I  
CALUMET AREA HYDROLOGIC  
MASTER PLAN (HMP)



CALUMET AREA  
City of Chicago, Cook County, Illinois

PREPARED FOR:  
CHICAGO DEPARTMENT OF ENVIRONMENT  
32 NORTH LA SALLE STREET - SUITE 2100  
CHICAGO, ILLINOIS 60602

PREPARED BY:  
V3 COMPANIES, LTD  
122 NORTH LA SALLE STREET  
CHICAGO, ILLINOIS 60602  
312.419.1905

FUNDING PROVIDED BY:  
CHICAGO DEPARTMENT OF ENVIRONMENT,  
ILLINOIS DEPARTMENT OF NATURAL RESOURCES C2000 PROGRAM,  
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT,  
AND A SUPPLEMENTAL ENVIRONMENTAL PROJECT WITH CHICAGO SPECIALTIES.

MARCH 21, 2006

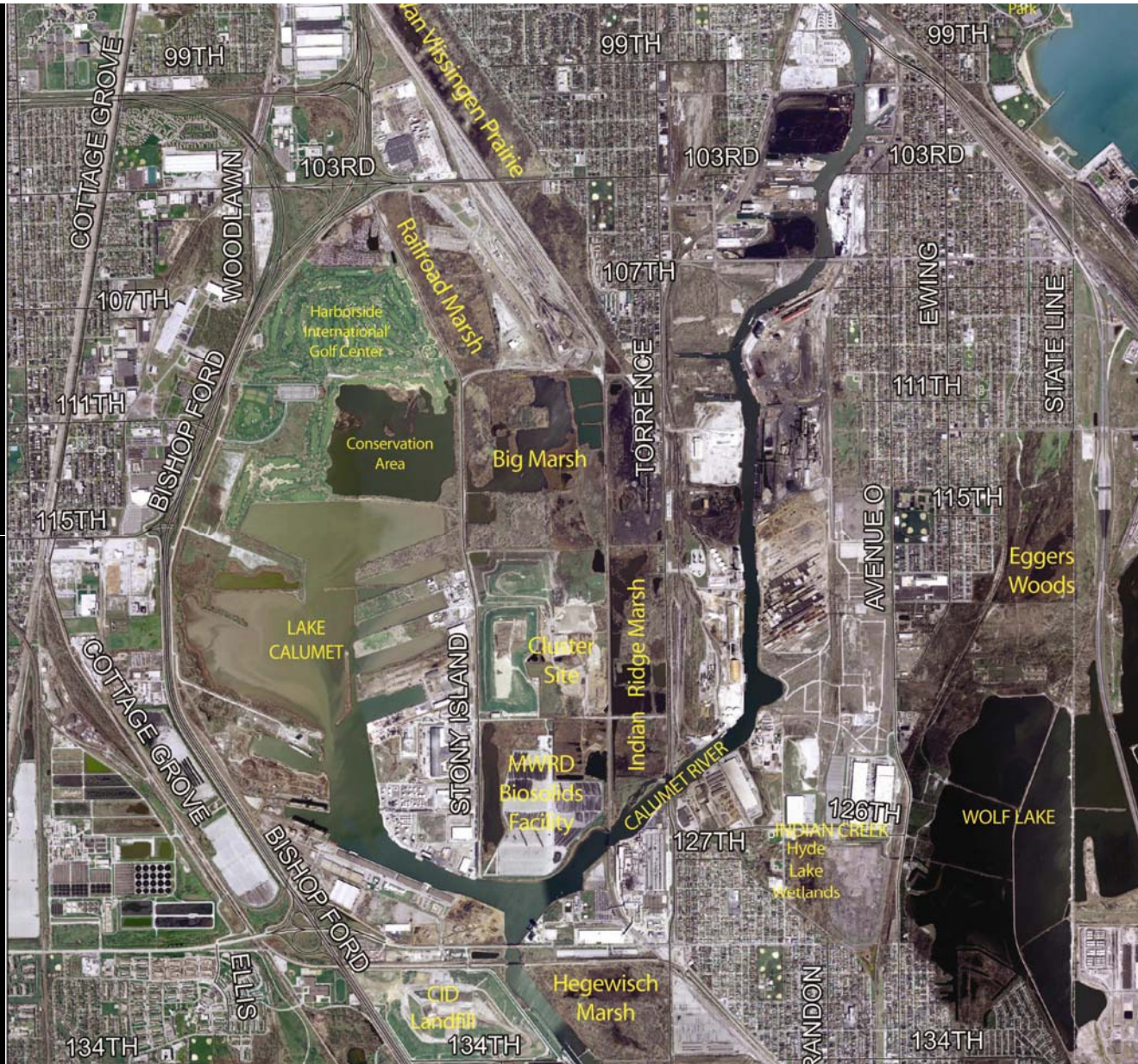
# Calumet Ecotox Protocol

*Protecting Calumet's Plants and Animals*

## Multi-agency effort to create ecotoxicological standards for Calumet open space plans

- Chicago Department of Environment
- US Environmental Protection Agency
- US Fish and Wildlife Service
- Illinois Department of Natural Resources
- Illinois Environmental Protection Agency
- Illinois Natural History Survey
- Chicago Park District
- Forest Preserve District of Cook County
- Waste Management and Research Center





# Hegewisch Marsh

## Ecological Rehabilitation Project



USFWS Grant

# Hegewisch Marsh

Ecological Rehabilitation Project

Debris Removal  
140 Locations



# Hegewisch Marsh

Ecological Rehabilitation Project

## Woody Invasives Removal



# Hegewisch Marsh

Ecological Rehabilitation Project

## Trail Staking / Grading





# Hegewisch Marsh

Ecological Rehabilitation Project

## Herbaceous Invasives Control

Reed Canary Grass

Common Reed

Kentucky Bluegrass

Canada Thistle

Garlic Mustard

Common Teasel

Cut-Leaved Teasel

Sweet Clover

Purple Loosestrife



# Hegewisch Marsh

Ecological Rehabilitation Project

## Vernal Pool Enhancement





# Hegewisch Marsh

## Ecological Rehabilitation Project

### Tree and Shrub Planting – Nov 5, 6 & 14, 2007

- Eastern Hophornbeam
- Sycamore
- Bur Oak
- Swamp White Oak
- Black Oak
- Nannyberry Viburnum

Tree Study with US  
Forest Service



# Hegewisch Marsh

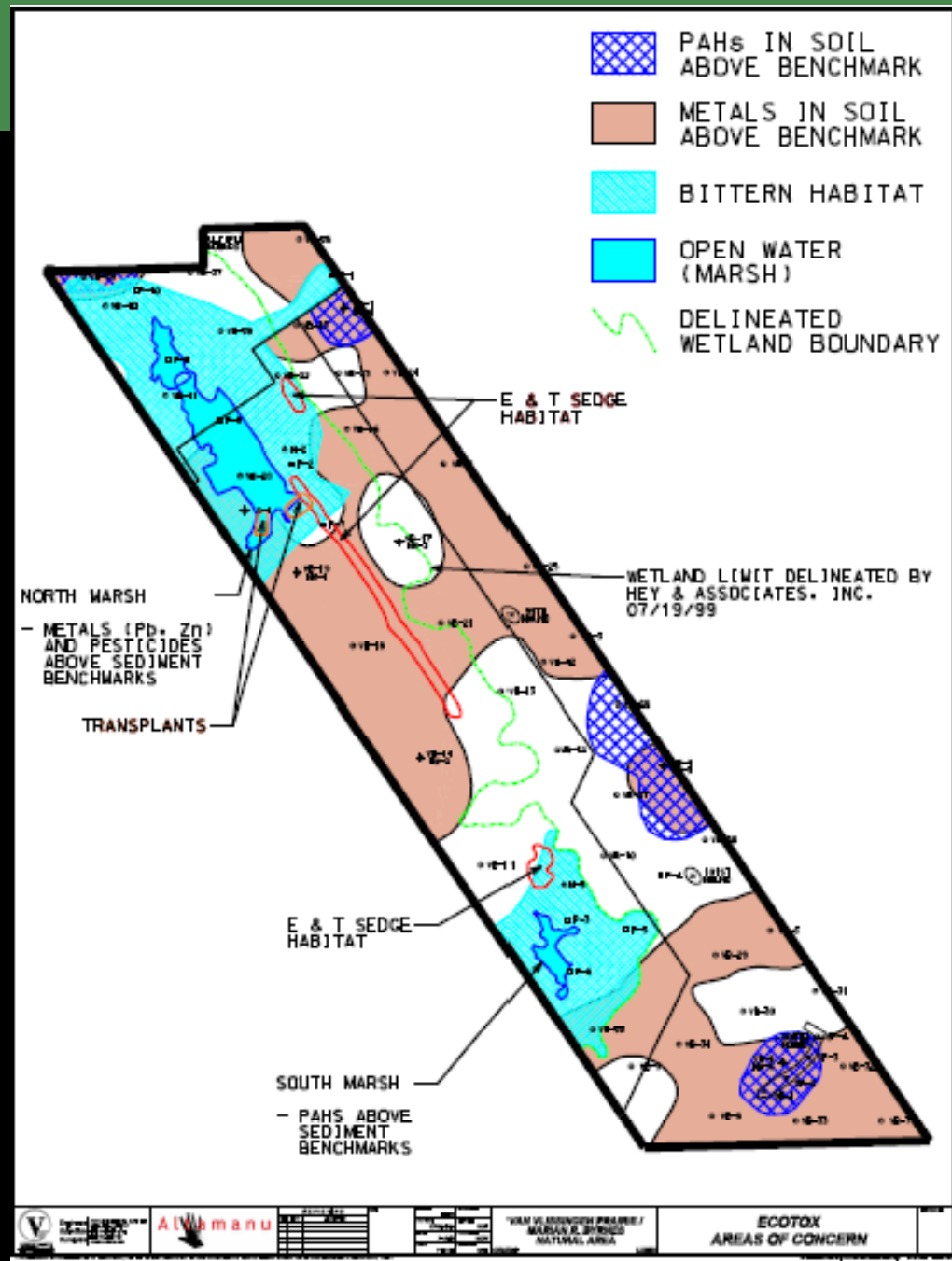
Ecological Rehabilitation Project  
PRESCRIBED BURN – Nov 07 & 08



# Hegewisch Marsh Current Habitat Map



# Other Sites



# For Discussion

- Urban, contaminated sites challenging (and fascinating) to restore
- Need to think creatively about how to manage sites to balance needs of ecological receptors, human visitors, regulatory mechanisms, and hydrologic regimes
- Thinking of the Calumet region as a whole system rather than disparate sites is key; hydrology is driver
- Intensive collaboration has led to the success of the effort – partners are vested in outcomes
- Consistent public outreach is necessary for continued buy-in
- Target non-traditional funding sources (ex: SEP) to assist with difficult-to-fund tasks
- “Patience is a Virtue” – big plans take time





**Nicole Kamins, [nkamins@cityofchicago.org](mailto:nkamins@cityofchicago.org)  
312.744.5959**