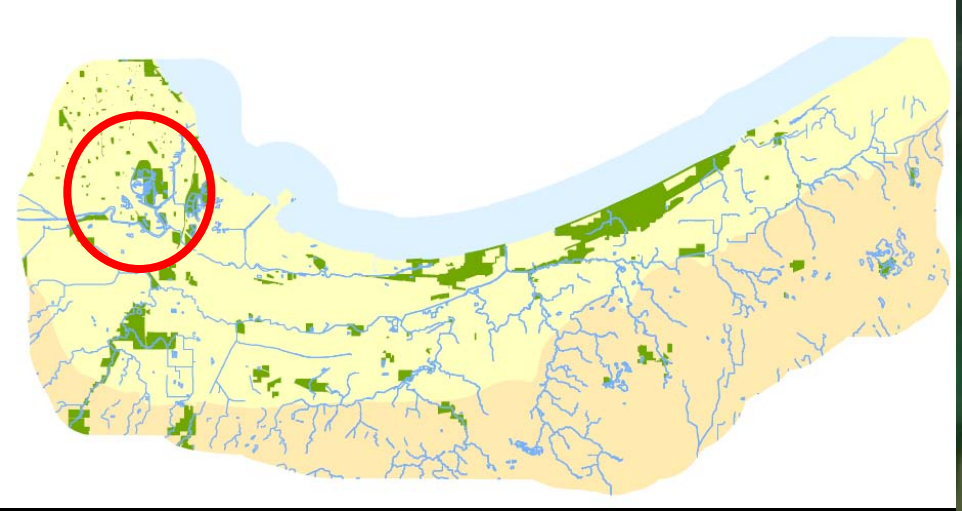


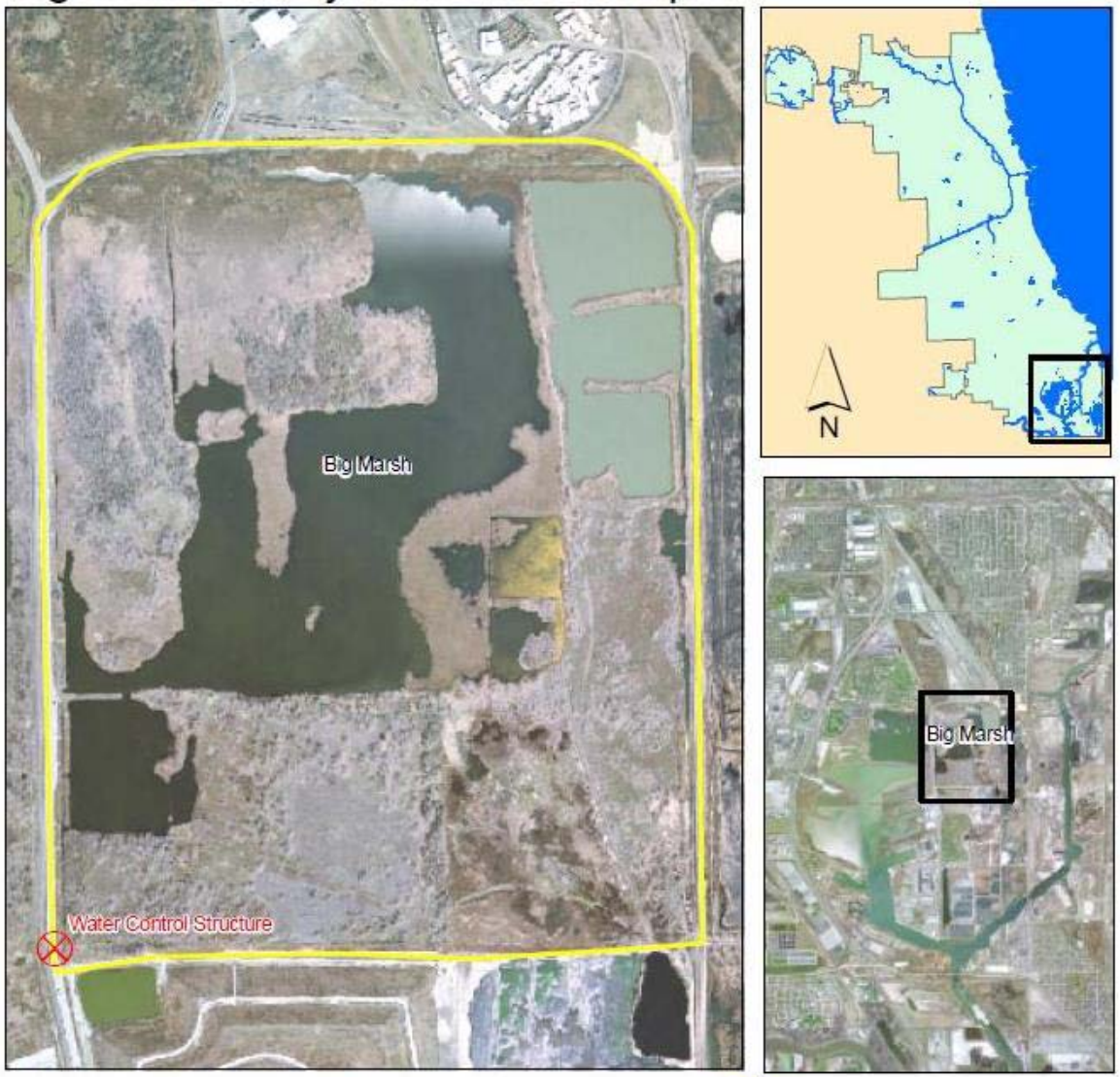
Great Lakes Restoration Initiative:

Hydrologic Master Plan Implementation At Big Marsh

Jerry Attere
Project Coordinator, Calumet Initiative
Chicago Department of Environment

Many photos courtesy of Southeast Chicago Historical Museum

Big Marsh - Project Location Map



City of Chicago
Richard M Daley
Mayor

Chicago
Department of Environment

Suzanne Malec-McKenna
Commissioner

Big Marsh

Key Site Features:

-Highly disturbed mixed marsh/wetland community

-Interlake and Acme Steel used the site to deposit slag and mine sand

- 8 main pools separated by earthen berms

-3 water control structures

Big Marsh

Key Site Issue - Hydrology

Table 1. Known Black-crowned Night-Heron nesting locations at Lake Calumet Wetlands, 1984–2003.

Location / Year	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Indian Ridge Marsh (IRM) *Phragmites*										X	X					X	X		X	X
IRM S. cottonwoods				X	X	X														
IRM N. cottonwoods								X	X	X	X	X								
Big Marsh *Phragmites*	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X					
Heron Pond *Phragmites*												X	X					X	X	

Black-crowned night heron habitat

(Nycticorax nycticorax)

- **Rookery moves between Big Marsh, Indian Ridge Marsh and Heron Pond**
- **Nest in *phragmites* / cottonwoods**
- **Flooding in 1999**
- **Data collected since 1984**

Solution:

Modification of the existing water control structure to maximize habitat & reduce flooding.

Sites' Biologic value is high!

PROPOSAL SUCCESS

- Supporting Established Regional Plans
  - GLRI
    - **Improvement of ecosystem function**
  - Lake Michigan Lakewide Management Plan
    - **Collaborative ecosystem management**
- Supporting Established Local Plans
  - Calumet Ecological Management Strategy (EMS)
  - Calumet Open Space Reserve Plan (COSR)
  - Hydrologic Master Plan (HMP)

OUTCOMES, OUTPUTS & RESULTS

- Outcomes
  - Protection & restoration of wetland habitats will increase
  - Protection & restoration of Great Lakes aquatic & terrestrial habitats will maintain & improve conditions of native wildlife
- Outputs
  - Baseline fish data
  - Project summary of design, construction & completion
- Results
  - Modification of existing water control structure