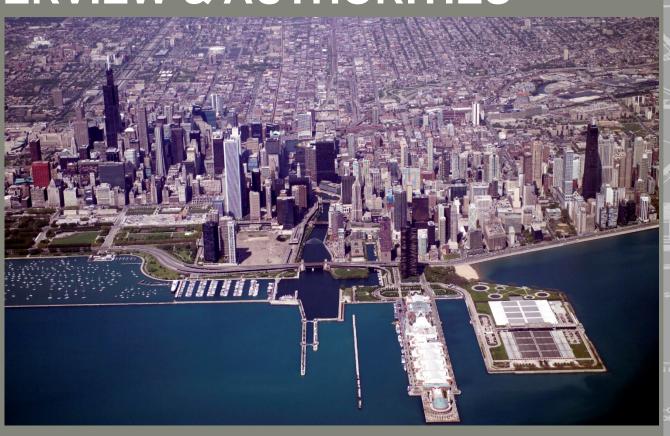
### U.S. ARMY CORPS OF ENGINEERS CHICAGO DISTRICT OVERVIEW & AUTHORITIES

David F. Bucaro, P.E.

Chief, Economic Formulation & Analysis Section

Calumet Stormwater Collaborative Meeting March 3, 2017



"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."





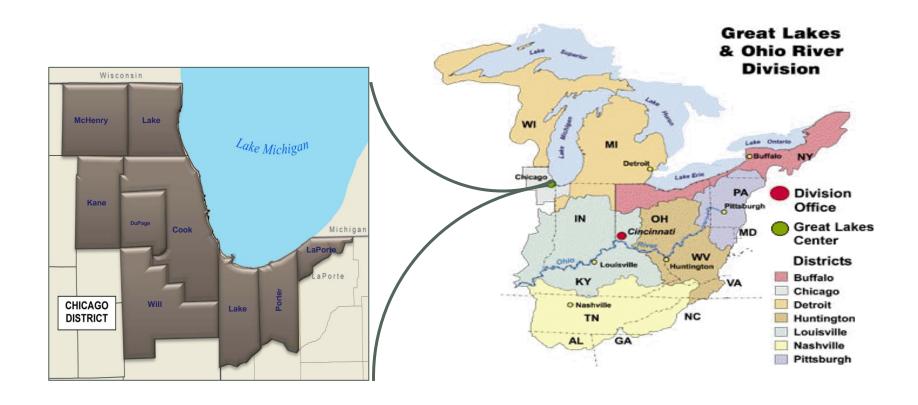
### PRESENTATION OUTLINE

- USACE and Chicago District Overview
- Civil Works Programs & Select Authorities
  - Project Highlights
- How to Partner with the Corps





### **USACE - CHICAGO DISTRICT**



9 Counties NE Illinois – 6 NW Indiana – 2+

5,000 sq. mi.

9.1 million people

<u>Mission:</u> USACE-Chicago District provides valued, world class leadership, engineering services, and management capabilities for diverse stakeholders and partners within the greater Chicago-land metropolitan area and to the Nation.





### **USACE - CHICAGO DISTRICT**

#### Civil Works Mission Areas:

- Flood Risk Management
- Coastal Storm Risk Management
- Navigation
- Ecosystem Restoration
- Regulatory
- Technical/Planning Assistance
- Emergency Management
- Overseas Contingency Operations
- Interagency and International Services (IIS) Program







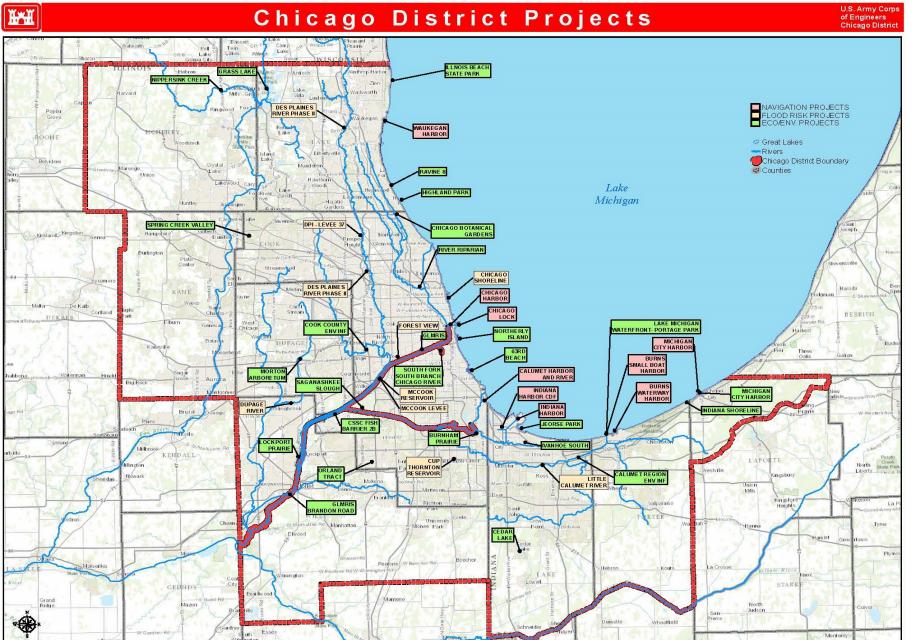
### HISTORY OF USACE IN THE CHICAGO AREA

- There has been a U.S. Army Corps of Engineers presence in the Chicago area since 1833; District formed 1870
- Early work focused on maintaining harbor and channel at the mouth of the Chicago River (office was on Fort Dearborn)
- Built harbor facilities at Michigan City and Waukegan in the 1800s
- Constructed the Cal-Sag Channel
- Also built lighthouses, marine hospitals and other facilities









#### Current Projects 12 FRM / Coastal 9 NAV 27 ER





# USACE Civil Works Programs & Select Authorities





## CIVIL WORKS MISSION it takes two to tango...

- Authorization
  - WRDA Water Resources Development Act
  - Appropriations Acts
  - Other Bills
- Appropriations
  - **E&W** Energy and Water Development Appropriations Act
  - GLRI Great Lakes Restoration Initiative (2010-19)







### **SELECT AUTHORITIES**

- Congressionally Authorized
  - General Investigation Studies (GI)
  - Construction General (CG)
- Delegated Authorities
- Continuing Authorities Program (CAP)
- Great Lakes Fishery & Ecosystem Restoration Program (GLFER)
- Technical Assistance Programs
  - Flood Plain Management Studies (FPMS)
  - Planning Assistance to States (PAS)
  - Emergency Preparedness & Response





### **CONGRESSIONALLY AUTHORIZED**

- Specifically Named Projects
  - Little Calumet River
  - Chicago Shoreline
  - CUP McCook/Thornton
  - Dispersal Barriers EfficacyGLMRIS

- Upper Des Plaines River
- Upper Des Plaines River & Tributaries
- Bubbly Creek
- Study Authorizations Based in Law
  - WRDA, R&H Acts
  - Resolutions from House or Senate Committees
- Projects Typically Large & Complex
  - 3 year feasibility phase
  - 10+ years to construction





### DELEGATED AUTHORITY CONTINUING AUTHORITIES PROGRAM (CAP)

- Nine authorities that allow the Chief of Engineers to construct projects of limited scope and complexity
- Congress does not need to specifically authorize projects or provide project-specific funding
- Start quickly implementation sooner
- Projects approved at Division Office, not HQUSACE
- Accelerated planning process ...level of detail is consistent with risk
- CAP Projects typically take 3-5 years from initial funding to start of construction





### **DELEGATED AUTHORITY** – Summary of CAP Program

Authority	Description	Per Project Federal Limit (\$)	Annual Prog. Limit (\$)	Cost Sharing (Fed/Non- Fed)
Sect 14	Emergency Streambank and Shore Protection	5,000,000	20,000,000	65/35
Sect 103	Coastal Storm Damage Reduction	10,000,000	30,000,000	65/35
Sect 107	Small Navigation	10,000,000	50,000,000	Varies by depth
Sect 111	Mitigation of Damages Caused by Federal Structures	10,000,000	N/A	Per original project
Sect 204	Beneficial Use of Dredged Material	10,000,000	50,000,000	65/35
Sect 205	Flood Damage Reduction	10,000,000	50,000,000	65/35
Sect 206	Aquatic Ecosystem Restoration	10,000,000	50,000,000	65/35
Sect 208	Clearing and Snagging	500,000	7,500,000	65/35
Sect 1135	Modifications for Improvement of the Environment	10,000,000	25,000,000	75/25

HIGHLIGHTED PROJECTS: CAP Section 205 Small Flood Damage Reductions Projects

Project: Forest View Levee

Sponsor: MWRDGC

Levee assessments identified stability and seepage issues with the structure in its current condition

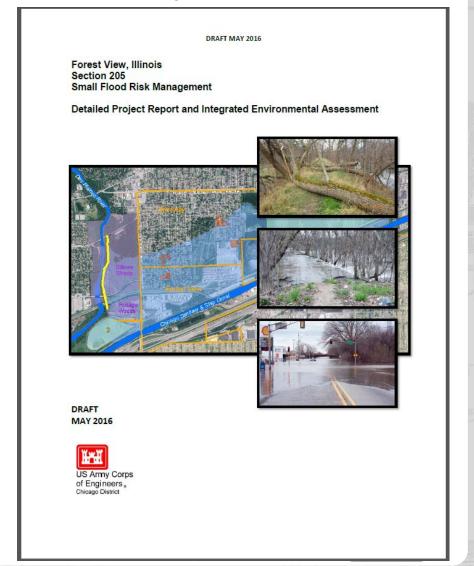
The approved plan will repair and improve the existing Lyons Levee along its entire 4,200 foot alignment

**Estimated Costs:** 

Federal Cost: \$ 3,825,000

Non-Federal Cost: \$2,075,000

Current Status: The Detailed Project Report was approved in January 2017. Currently under design.



### HIGHLIGHTED PROJECTS: CAP Section 206 Aquatic Ecosystem Restoration Projects

Project: Eugene Field

Sponsor: Chicago Park District

12.75-acre restoration of river and riparian zones along the Chicago River

Bank naturalization to facilitation reconnection of the floodplain and restore native landscape of the site

#### **Estimated Costs:**

Federal Cost: \$975,000

Non-Federal Cost: \$535,200

Current Status: Construction completed in 2014







Fluvial Stone Riffle Habitat with American Waterwillow

Reed & Duck Potato Wetland Pocket Surrounded by White Oak Savanna

Pickerel Weed, Broad-Fruit Burr-Reed Burr

> 100 % Native Vegetation Cover on Chicago River Bank





### DELEGATED AUTHORITY GLFER Program

- Section 506, WRDA 2000, as amended
  - Ecosystem Restoration Authority similar to CAP Section 206
  - Projects in the Great Lakes Basin, historically connected tributaries or projects outside the basin that help restore Great Lakes resources
  - Cost shared 65% Fed/ 35% non-Fed
  - Authority for \$100M
  - Appropriations via USACE E&W work plan or GLRI funding ... has not made the cut for the PRESBUD to date







### HIGHLIGHTED PROJECTS: GLFER Northerly Island





**Existing Conditions** 



Mudpuppy



**Pond Excavation** 

- Sponsor: Chicago Park District
- Restoration of 40 acres on the southern part of the island
- Create 6 habitat types that existed before the City was developed: lacustrine, dunal pond, emergent marsh, wet prairie, mesic prairie, and oak savanna
- Cost:
  - Federal: \$6,160,000
  - Non-Federal: \$3,310,000





### HIGHLIGHTED PROJECTS: GLFER Little Calumet River Riparian

- Sponsor: Shirley Heinz Land Trust
- Restoration of 43 acres surrounding the East Branch Little Calumet River
- Restoration of natural habitat variability, increased native diversity of floodplain forest and canopy coverage, and invasive elimination
- Construction completed in 2015
- Cost:
  - Federal: \$240,000
  - Non-Federal: \$130,000







### TECHNICAL ASSISTANCE PROGRAMS FLOOD PLAIN MANAGEMENT SERVICES (FPMS)

Section 206 of the Flood Control Act 1960, as amended 100% Fed to state, regional and local governments

- Limited Funding (FY09 \$8.6M nationwide)
- Types of Services
  - General Technical Services
    - Develops or interprets site specific data on obstructions to flood flows, flood formation, and timing, flood depths or stages, flood water velocities, extent, duration and frequency of floods
  - General Planning Assistance
    - Flood plain delineation, flood warning studies, urbanization impact studies, flood damage reduction studies, flood proofing studies
- No project construction





### TECHNICAL ASSISTANCE PROGRAMS PLANNING ASSISTANCE TO STATES (PAS) OVERVIEW

Authorized by: Section 22 of WRDA1974, as amended Partner with Tribes and other non-Federal entities

- %50 Federal /%50 non-Federal cost share
- Work-in-kind or cash

Preparation of comprehensive plans for the development, use, and conservation of water and related land resources

Needed planning assistance is determined by non-Federal partners

Initiated upon request and approval Studies conducted at planning-level of detail only

No feasibility-level studies or detailed design





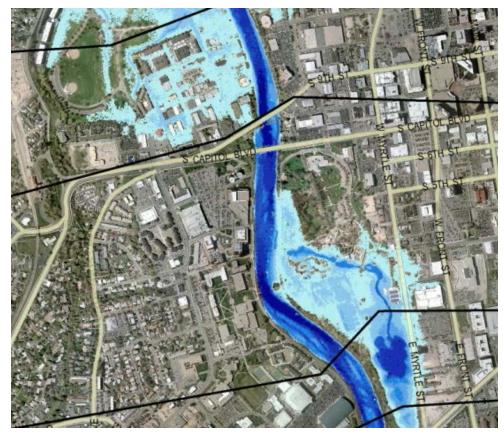
### **TYPICAL PAS STUDIES**

The program can encompass many types of studies dealing with water

resources issues.

#### Examples include:

- Flood damage reduction assessments
- Flood inundation mapping
- Dam safety and failure modeling
- Water supply and demand analysis
- Water quality assessments
- Environmental restoration concepts
- Wetlands delineation and biological assessments
- Coastal Zone Management/ Protection







US Army Corps

### PAS STUDY HIGHLIGHT



Non-Federal Sponsor: Cook County Bureau of Economic Development

Work-in-Kind: Funding for Center for Neighborhood Technology (CNT)

Agreement Initiated: September 30, 2015

**Study Description:** To develop a shared plan, with specific actions for each of the six high flood risk communities within the Watersheds of the Little Calumet River and the Cal Sag Channel in the south suburbs of Cook County, Illinois, and find solutions to mitigate risks of future flooding and build broader

community resiliency

#### **ENVIRONMENTAL INFRASTRUCTURE:**

### Cook County, IL and Calumet Region, IN

- Authorized by Section 219, WRDA 1992, as amended
- Cost Share: 75% Federal/ 25% Non-Federal
- Allows the Corps to provide technical planning, design and construction to non-federal interests who have environmental infrastructure needs in designated areas
- These needs include development of wastewater treatment and related facilities and water supply, treatment and distribution facilities







#### **ENVIRONMENTAL INFRASTRUCTURE PROGRAM -**

Section 219: Calumet Region, Indiana



Portage Municipal Water Reclamation Facility



Hammond Relief Interceptor Project







#### **ENVIRONMENTAL INFRASTRUCTURE PROGRAM -**

Section 219: Cook County, Illinois



Town of Griffith new storm sewers



Lake County Schererville Heights Project

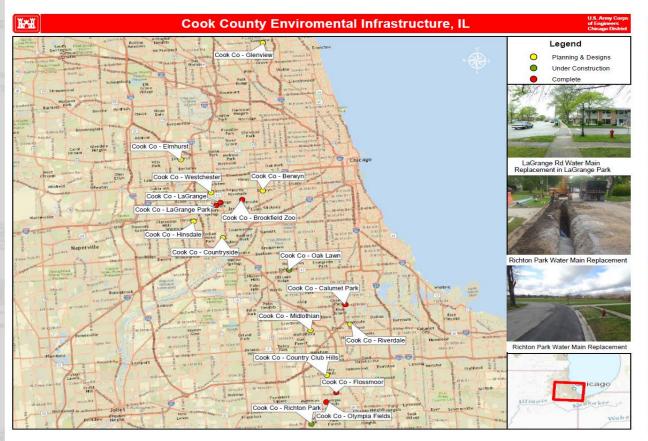


Lake County Hermit Lake Project





#### **ENVIRONMENTAL INFRASTRUCTURE PROGRAM – Section 219**





Cook County, IL
9 Planning & Design
1 Under Construction
6 Completed

Lake County, IN
2 Planning & Design
5 Under Construction
22 Completed





### How to partner with USACE?





### **GETTING STARTED**

- Local perception of a water resources problem
- Contact Chicago District Planning:
  - CELRC-Planning@usace.army.mil
- District provides guidance on applicable civil works programs and study authorities
- District requests funding to conduct study
- Sign cost-sharing agreement
- Initiate study when funds are appropriated





### TYPICAL NON-FEDERAL RESPONSIBILITIES FOR PROJECT CONSTRUCTION

- Provide all lands, easements, rights-of-way, relocations, and disposal areas (LERRDs) necessary for project construction and operation and maintenance
- Provide any cash or work-in-kind contributions to satisfy cost-sharing requirements as per project agreements
- Hold and save the United States free from damages due to the construction and maintenance of the project, except damages due to fault or negligence of the United States or its contractors
- Comply with the provisions of pertinent Federal acts in carrying out the specified non-Federal responsibilities of the project
- After completion, accept ownership of and maintain and operate the project in accordance with regulations prescribed by the Secretary of the Army





### ADDITIONAL RESOURCES







### CONTACT

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