

# U.S. ARMY CORPS OF ENGINEERS OVERVIEW OF PROGRAMS & AUTHORITIES

**David F. Bucaro, P.E.**

Outreach Manager  
Chicago District

IAFSM Annual Conference  
14 March 2018



*"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."*



US Army Corps  
of Engineers®



# PRESENTATION OUTLINE

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



US Army Corps  
of Engineers®



U.S. ARMY

# USACE - CHICAGO DISTRICT



**9 Counties**  
**NE Illinois – 6**  
**NW Indiana – 2+**

**5,000 sq. mi.**

**9.1 million people**

**Mission:** 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.



US Army Corps  
of Engineers®





# 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

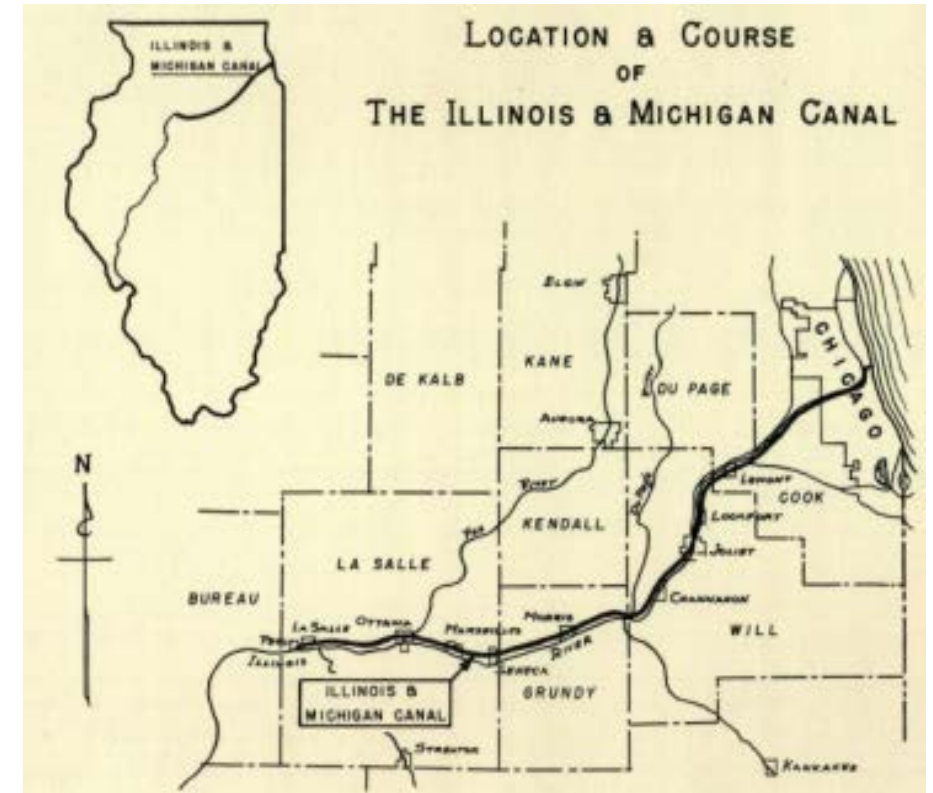


US Army Corps  
of Engineers®



# 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, post offices and other facilities



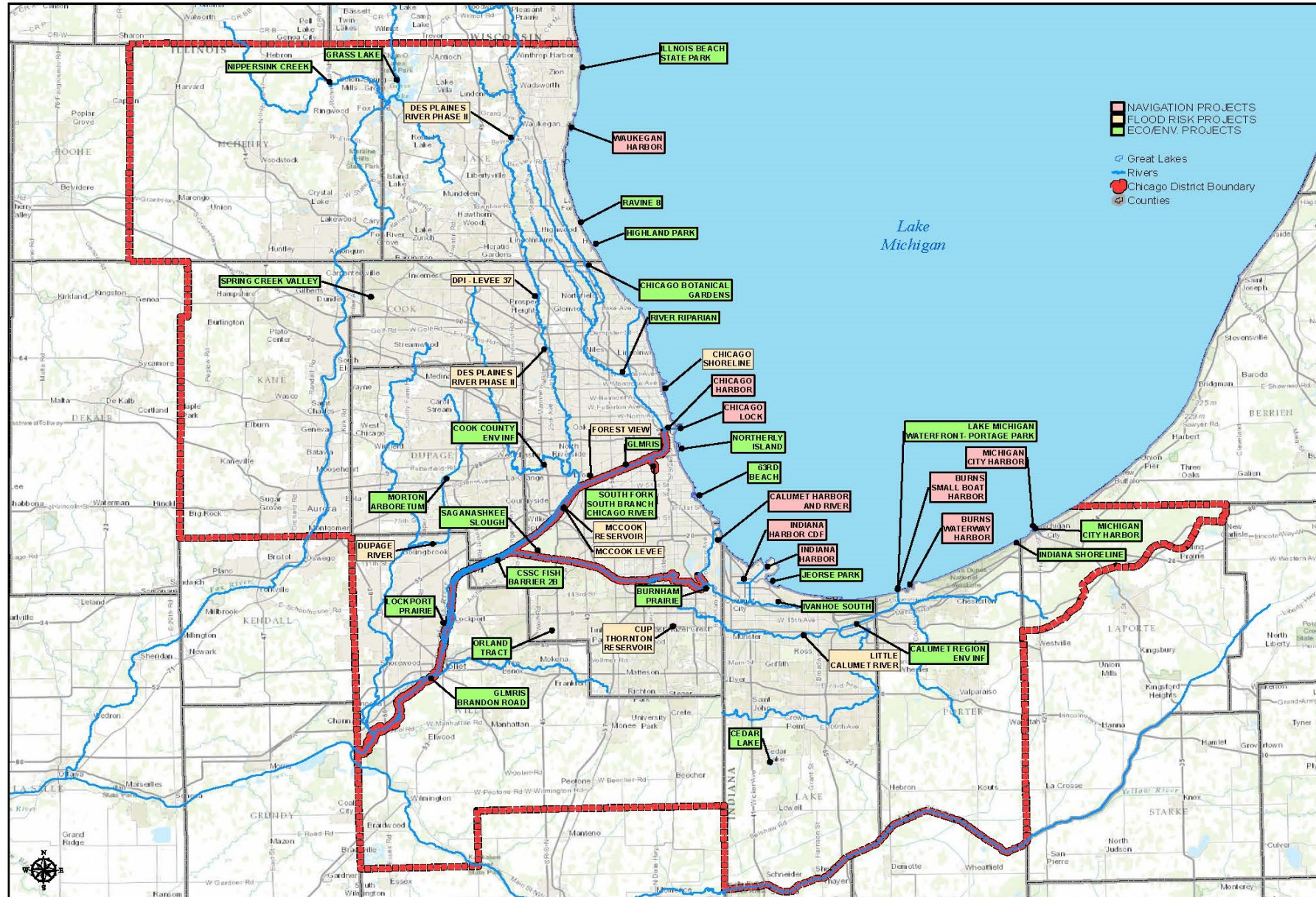
US Army Corps  
of Engineers®







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



# **USACE Civil Works Programs & Select Authorities**



**US Army Corps  
of Engineers®**





# 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)



US Army Corps  
of Engineers®





# 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



US Army Corps  
of Engineers®



U.S. ARMY

# CONGRESSIONALLY AUTHORIZED

- Specifically Named Projects
  - Little Calumet River
  - Chicago Shoreline
  - CUP McCook/Thornton
  - Dispersal Barriers Efficacy
  - Upper Des Plaines River & Tributaries
  - Bubbly Creek
  - GLMRIS
- 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



US Army Corps  
of Engineers®



# **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



US Army Corps  
of Engineers®





# 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

# DELEGATED AUTHORITY – CAP Project Steps



- **Letter of Intent (LOI)** from a non-Federal Sponsor initiates project
- **Federal Interest Determination (FID)** approval from USACE Division
- **Feasibility Cost Sharing Agreement (FCSA)** signed by non-Federal Sponsor
- **Feasibility Study (FS) & Environmental Assessment (EA)**
  - 24 month process to complete Detailed Project Report (DPR)
  - Cost share: 100% Federal for \$100,000; additional at 50% Federal; 50% non-Federal
- **Sign Project Partnering Agreement (PPA)**
  - Defines Federal and non-Federal contributions
  - Some non-Federal contributions may be in the form of in-kind services and credit for lands, easements, rights-of-way, relocations, and disposal areas (LERRDs)
  - Defines long term operations and maintenance responsibilities
- **Design & Construction**
  - Cost share: varies by authority; but typically 65% Federal; 35% non-Federal
- **Operation and Maintenance**
  - All operation, maintenance, repair, rehabilitation and replacement (OMRR&R) of the project in the future is 100% non-Federal cost



US Army Corps  
of Engineers®



# 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

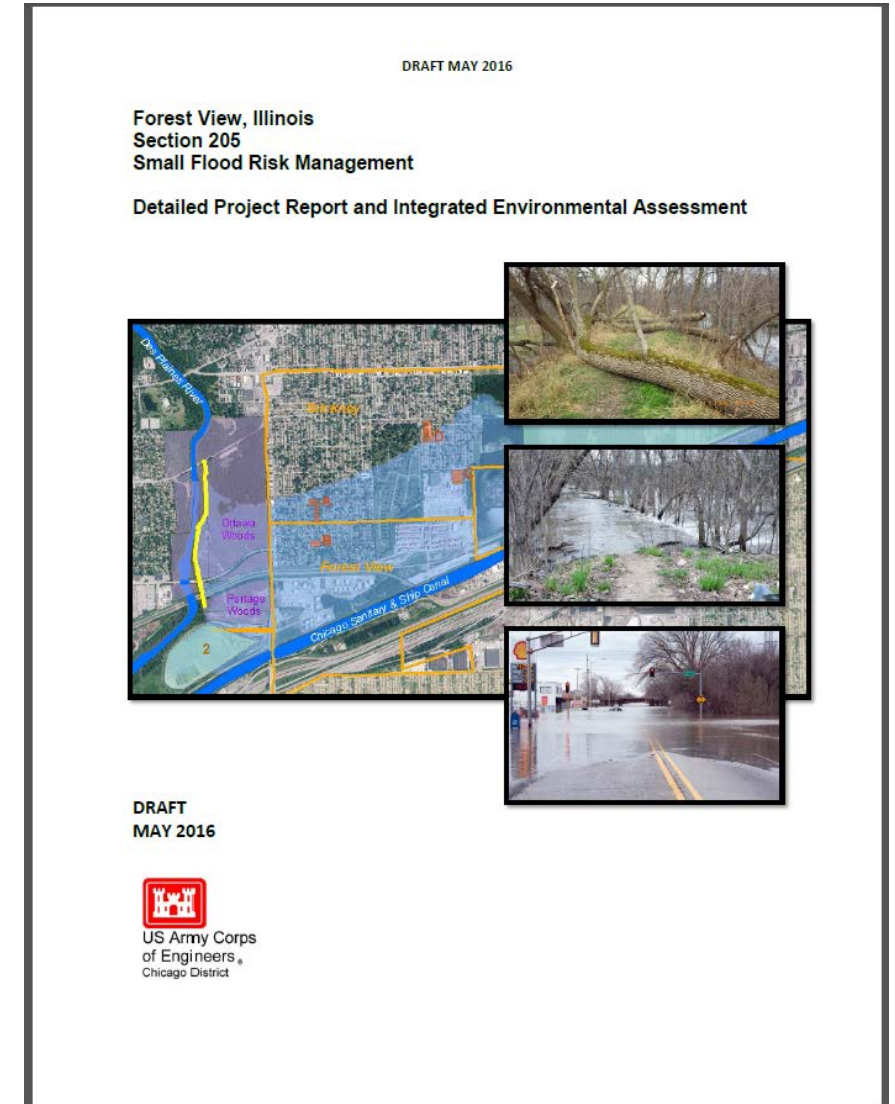
The approved plan will repair and improve the existing Lyons Levee along its entire 4,200 foot alignment

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

### Native Riparian Restoration



### Floodplain Wetland with Native Marsh



US Army Corps  
of Engineers®





Pickerel Weed, Broad-  
Fruit Burr-Reed Burr  
Reed & Duck Potato  
Wetland Pocket  
Surrounded by White  
Oak Savanna



Fluvial Stone Riffle Habitat  
with American Waterwillow



100 % Native Vegetation  
Cover on Chicago River Bank



US Army Corps  
of Engineers®





# 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



US Army Corps  
of Engineers®



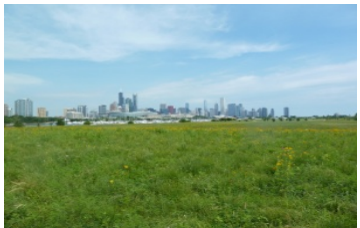


# HIGHLIGHTED PROJECTS: GLFER

## Northerly Island



- 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



Existing  
Conditions



Mudpuppy



Pond Excavation



US Army Corps  
of Engineers®



# 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



US Army Corps  
of Engineers®





# 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 (~\$10M 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



US Army Corps  
of Engineers®





# ***TECHNICAL ASSISTANCE PROGRAMS***

## **PLANNING ASSISTANCE TO STATES (PAS) OVERVIEW**

Authorized by: *Section 22 of WRDA 1974, 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



US Army Corps  
of Engineers®



# 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  
of Engineers®



# 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



US Army Corps  
of Engineers®





# 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



US Army Corps  
of Engineers®



# ENVIRONMENTAL INFRASTRUCTURE PROGRAM -

## Section 219: Calumet Region, Indiana



Portage Municipal Water  
Reclamation Facility



Hammond Relief Interceptor Project



Pipelining operation in  
East Chicago, IN



US Army Corps  
of Engineers®





# ENVIRONMENTAL INFRASTRUCTURE PROGRAM -

## Section 219: Cook County, Illinois



Town of Griffith new storm  
sewers



Lake County Schererville Heights Project



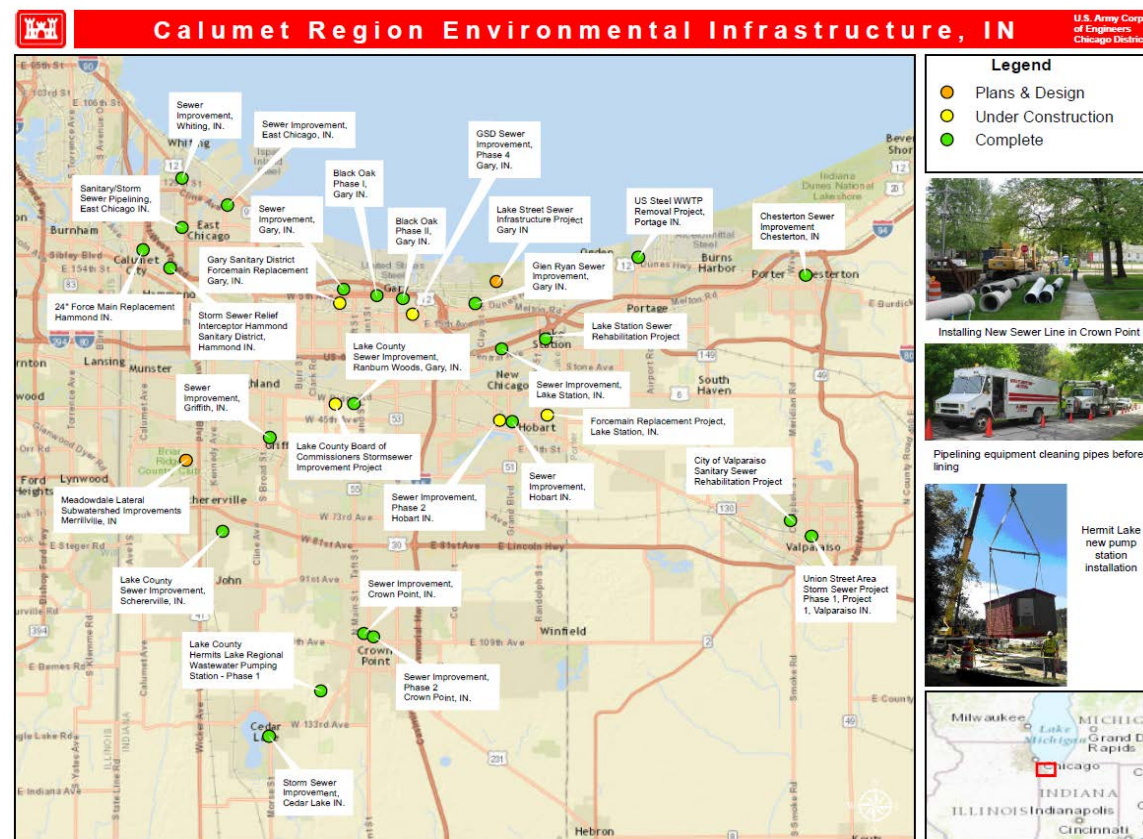
Lake County Hermit Lake Project



US Army Corps  
of Engineers®







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

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



**US Army Corps  
of Engineers®**



# How to partner with USACE?



US Army Corps  
of Engineers®



# GETTING STARTED

- Local perception of a water resources problem
- Contact Chicago District Planning:  
[CELRC-Planning@usace.army.mil](mailto:CELRC-Planning@usace.army.mil)
- District provides guidance on applicable Civil Works programs and study authorities
- Non-Federal sponsor sends a letter of request
- District requests funding to conduct study
- Sign cost-sharing agreement
- Initiate study when funds are appropriated



US Army Corps  
of Engineers®





# ***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



US Army Corps  
of Engineers®



# ADDITIONAL RESOURCES

<http://www.lrc.usace.army.mil>



US Army Corps  
of Engineers®



# CONTACT

David F. Bucaro, P.E.  
Outreach Manager  
Chicago District, U.S. Army Corps of Engineers  
231 South LaSalle Street, Suite 1500  
Chicago, IL 60604  
(312) 846-5583  
[david.f.bucaro@usace.army.mil](mailto:david.f.bucaro@usace.army.mil)

Chicago District website: <http://www.lrc.usace.army.mil>

Planning assistance: [CELRC-Planning@usace.army.mil](mailto:CELRC-Planning@usace.army.mil)



US Army Corps  
of Engineers®

