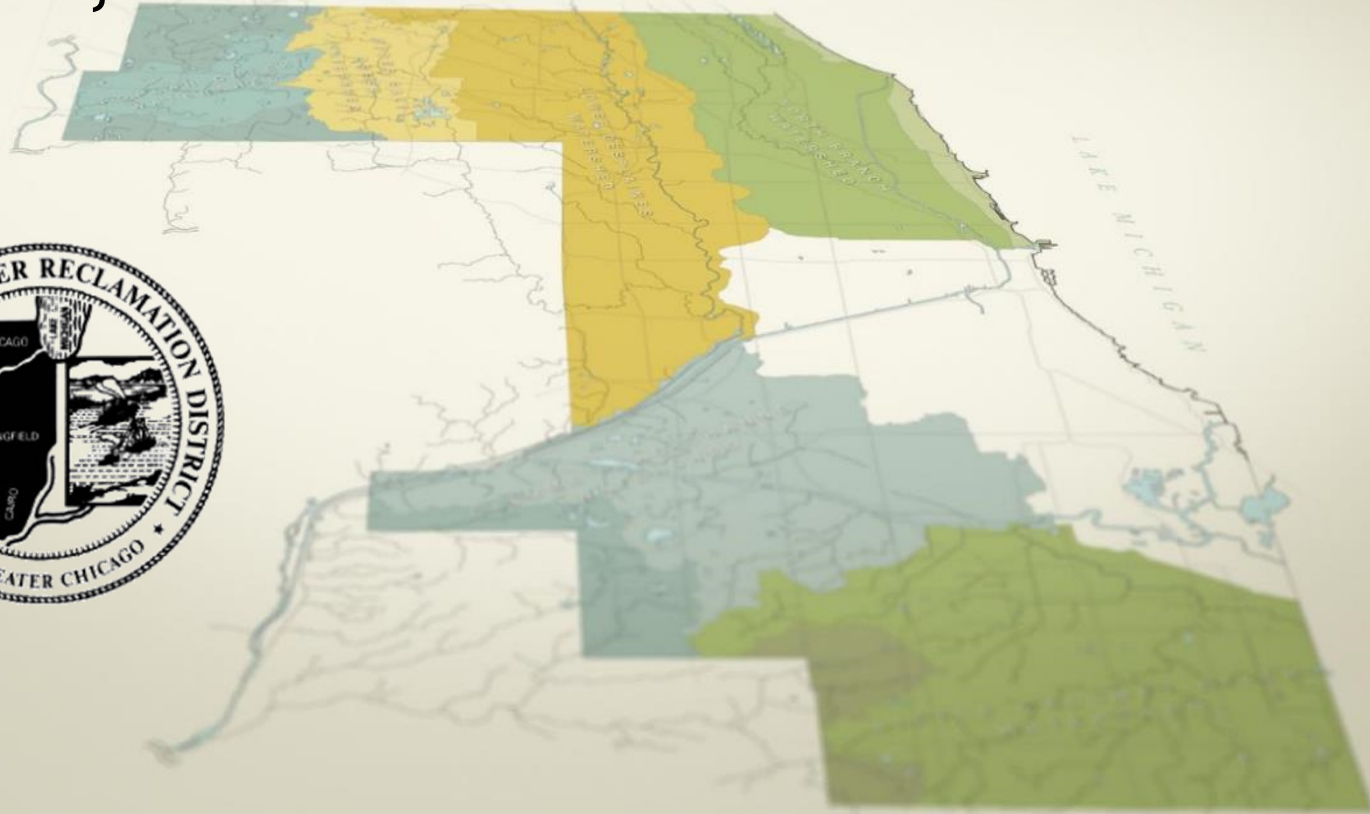


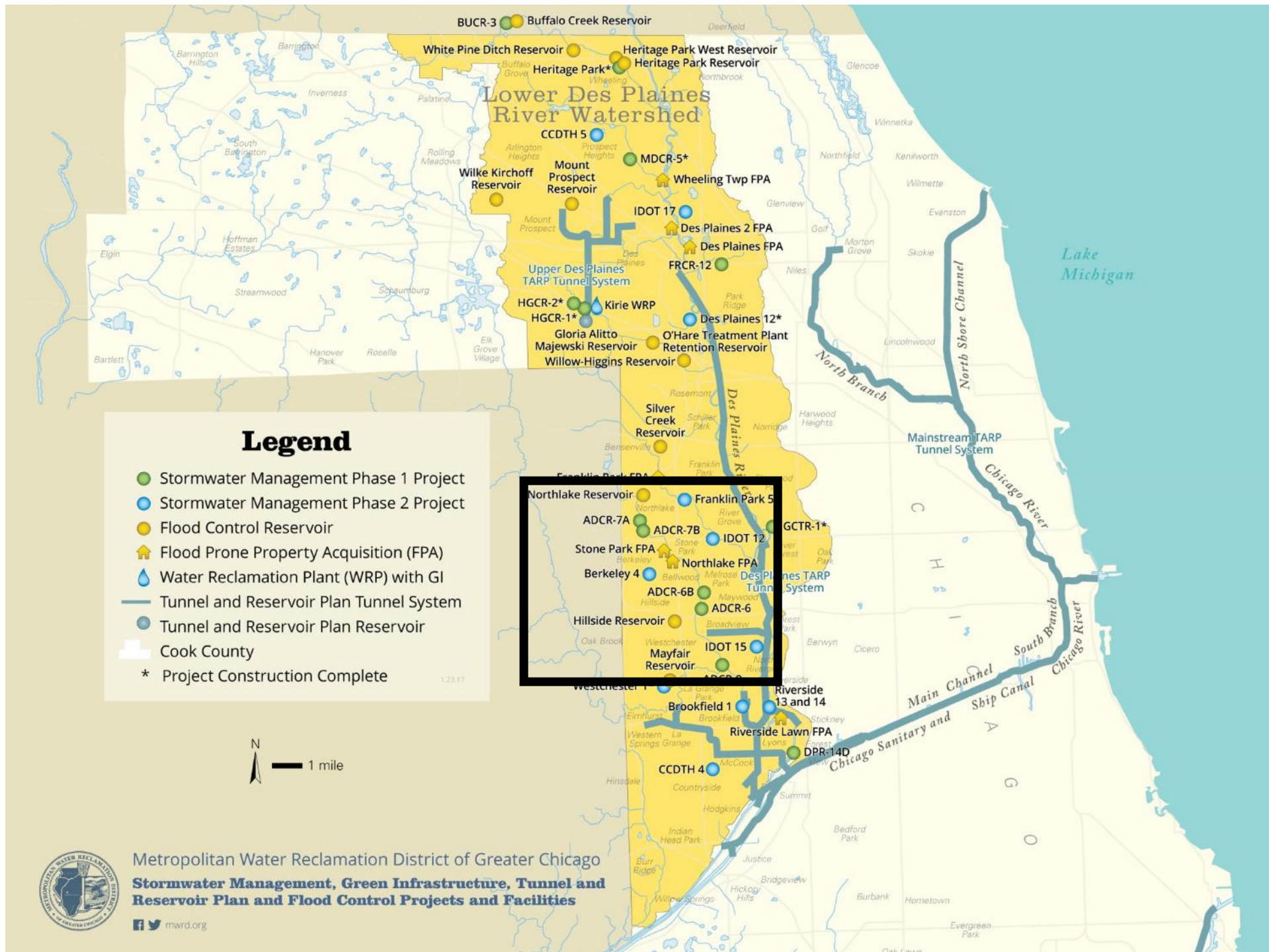
Improving an Urban Watershed

The Past, Present and Future of Addison Creek



IAFSM Conference

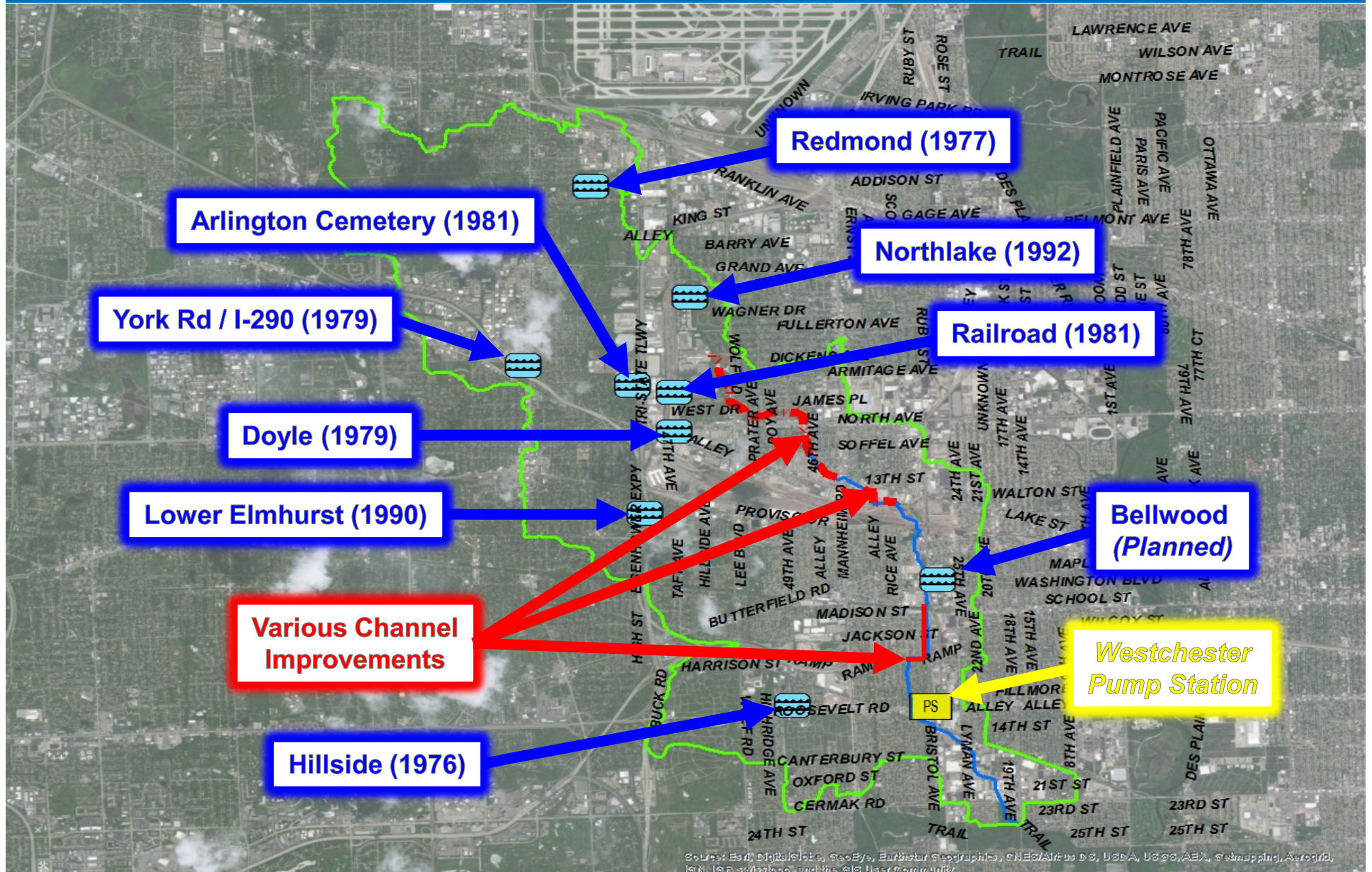
March 14, 2018





PAST

Reservoirs and Channel Improvements

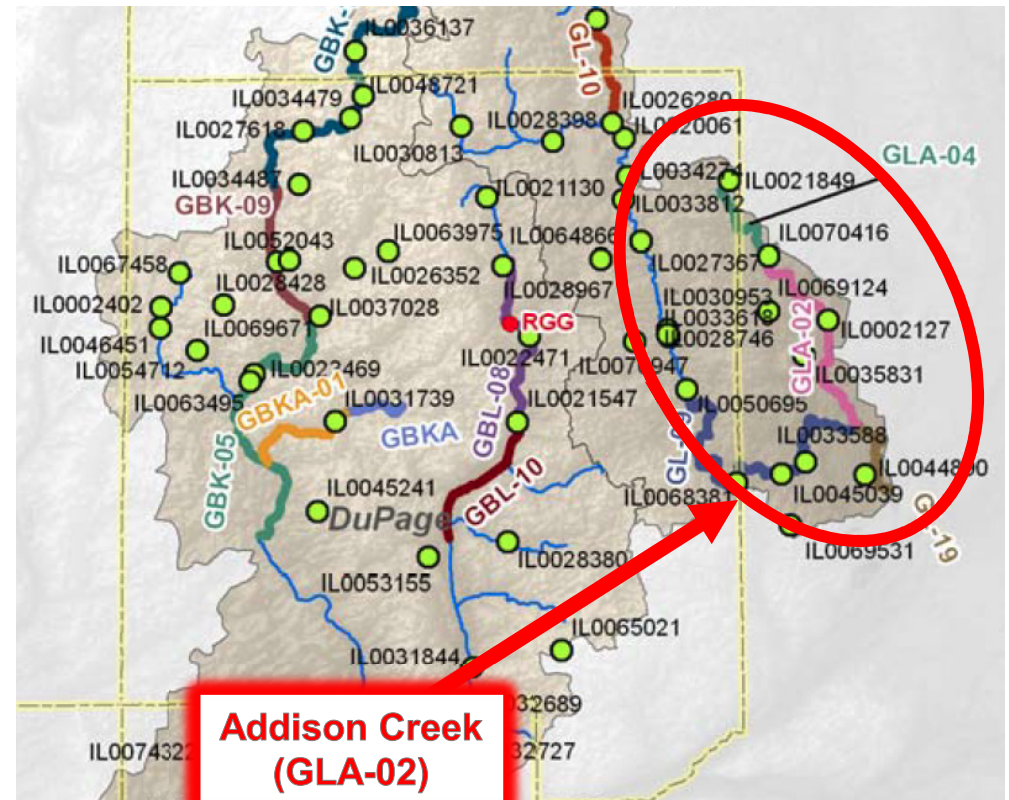




PAST / PRESENT

Water Quality

- **Impairments to Designated Uses:**
 - Aquatic Life
 - Primary Contact Recreation
- **Sources Include:**
 - Urban Runoff
 - Combined sewer overflow
- **TMDL**
- **NPDES discharge permits**





PAST/PRESENT

P.A., CCSMP, DWP, and WMO

- **P.A. 93-1049**
Enacted 2004
- **Cook County Stormwater Management Plan**
Completed 2007 & Amended 2014
- **Lower Des Plaines River**
Detailed Watershed Plan
Completed 2011
- **P.A. 98-0652**
Enacted 2014
- **Watershed Management Ordinance**
Effective 5/1/14 and Amended 2/15/18

COOK COUNTY STORMWATER MANAGEMENT PLAN

July 10, 2014

Final Report

Detailed Watershed Plan for the
Lower Des Plaines River
Watershed: Volume 1



Watershed Management Ordinance

Effective
May 1, 2014

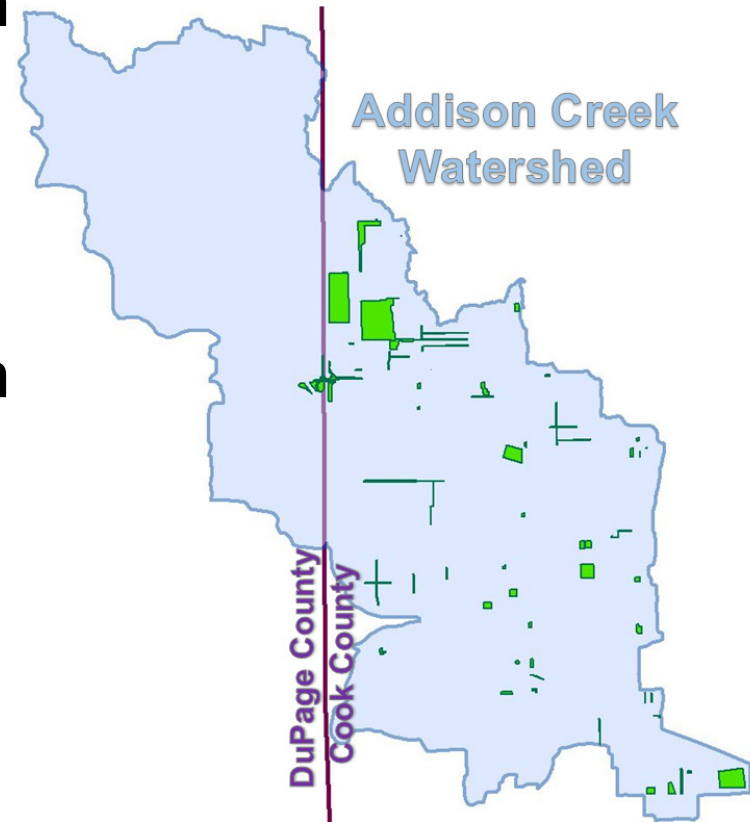
As amended
February 15, 2018

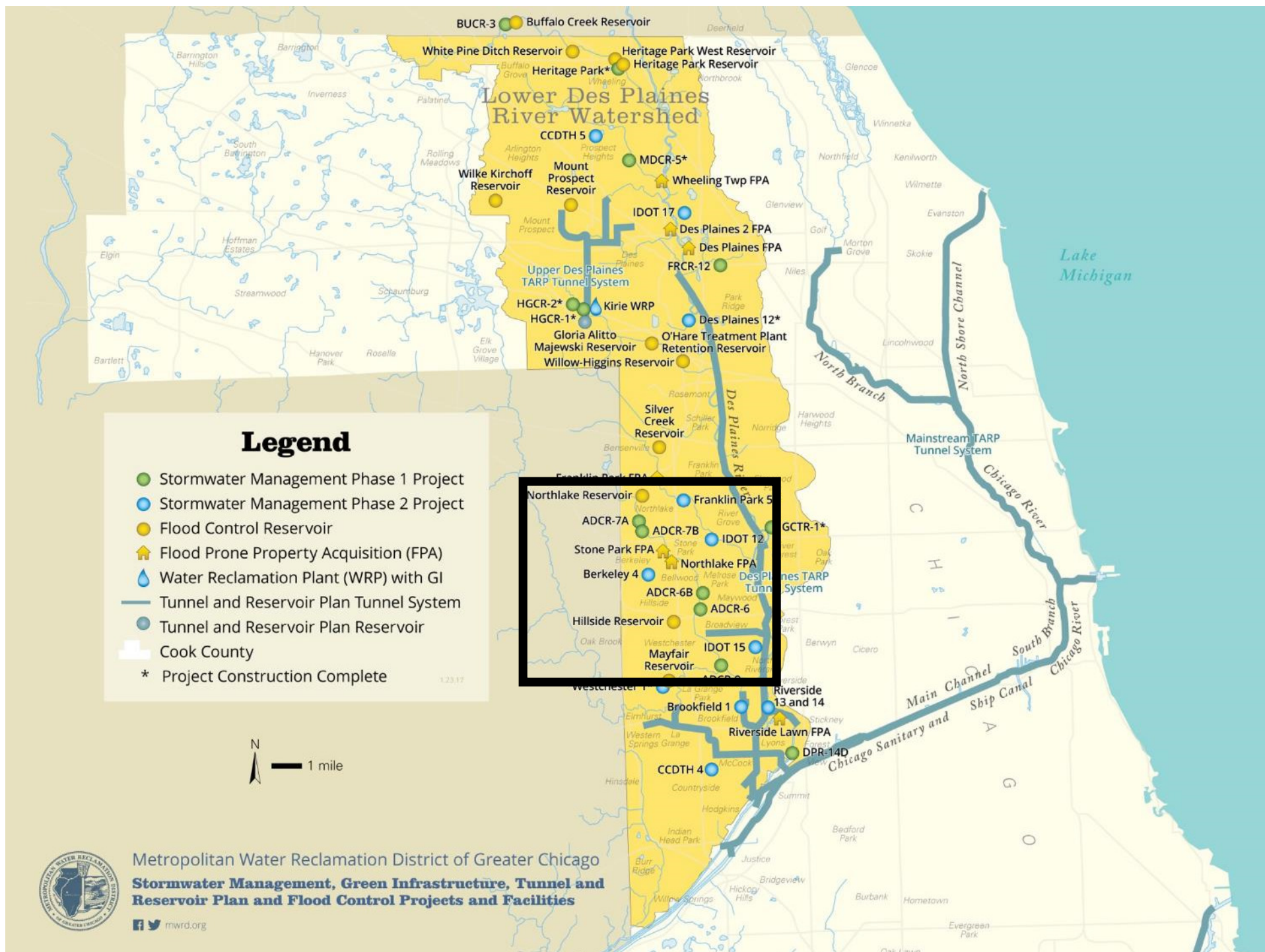


PRESENT

Watershed Management Ordinance

- Since 2014, new construction and redevelopment created app. 50.69 ac-ft of detention through the WMO.
- Since 2014, new construction and redevelopment created app. 6.97 ac-ft of green infrastructure through the WMO.



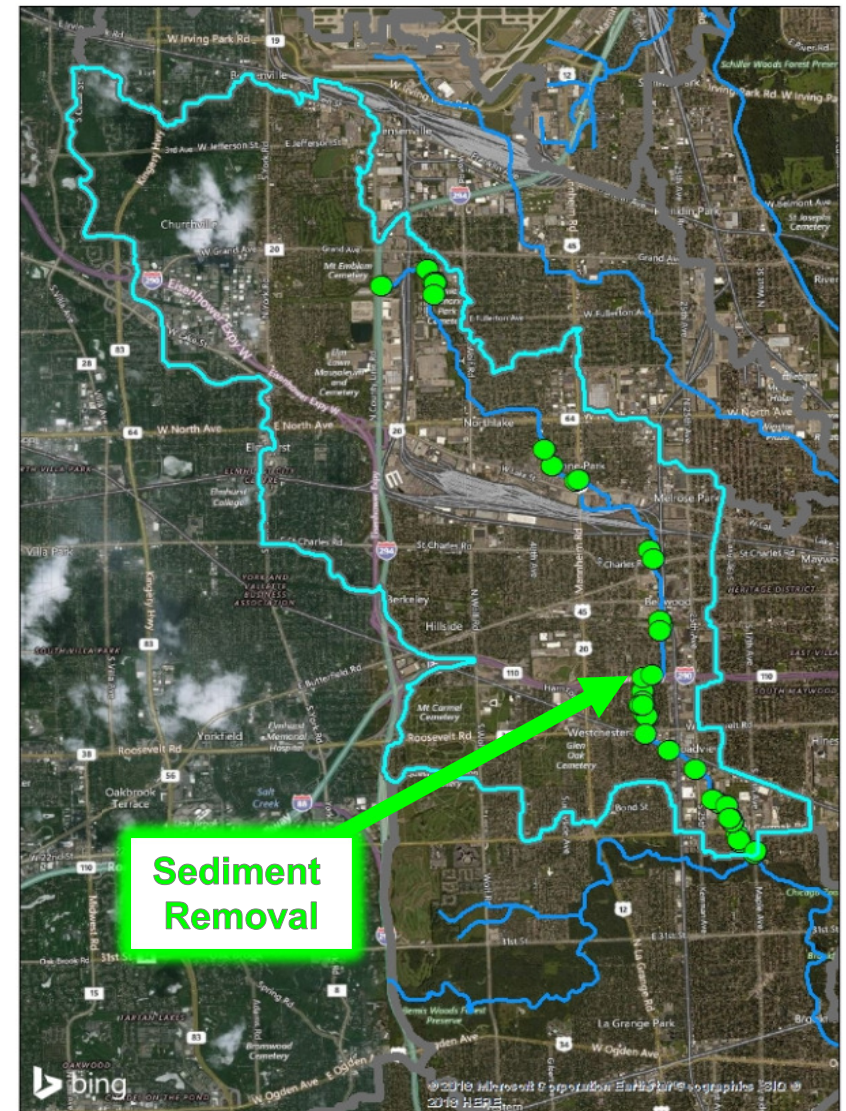




PRESENT

Small Streams Maintenance Program

- Since November 2014, SSMP removed app. 5,713 CY of debris.
- In April 2017, SSMP removed app. 950 CY of sediment in Bellwood.
- In July 2017, MWRD installed debris boom.





PRESENT

Small Streams Maintenance Program





PRESENT

Small Streams Maintenance Program

Cermak Road
June 2011



Cermak Road
August 2014

SSMP Cleared Vegetation in 2014



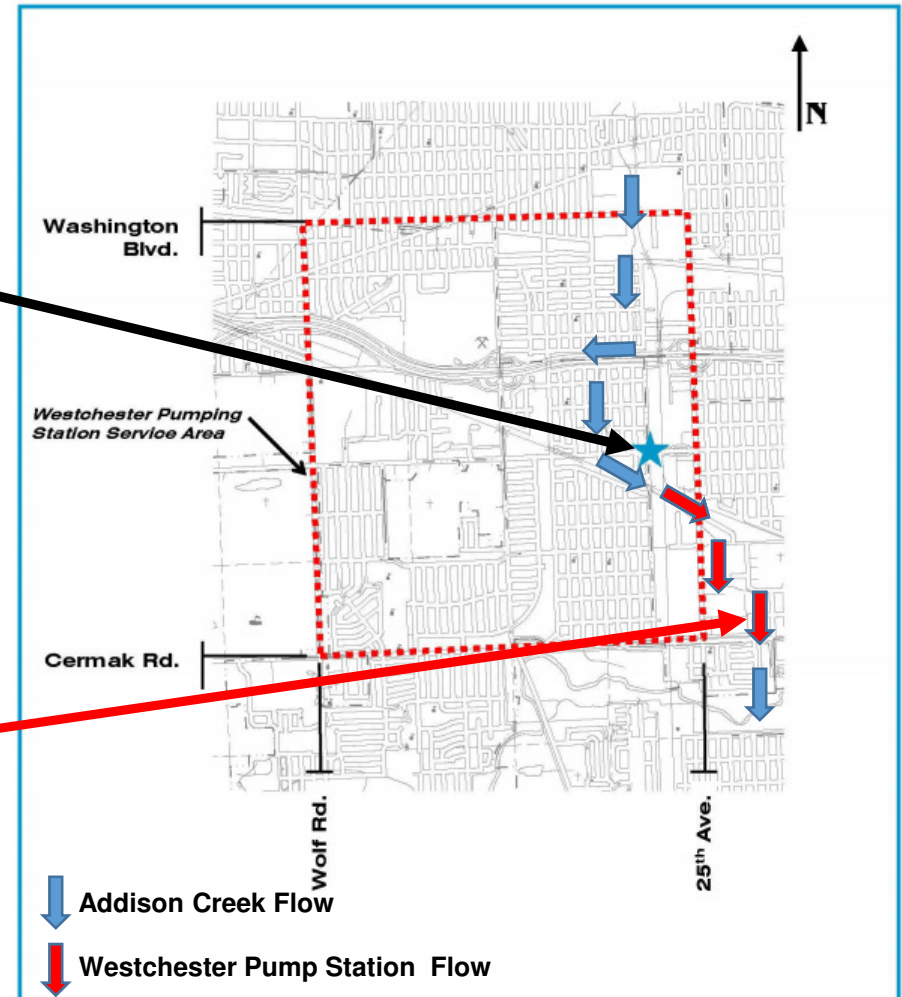
Cermak Road
October 2016





PRESENT

Westchester Pump Station & Debris Boom

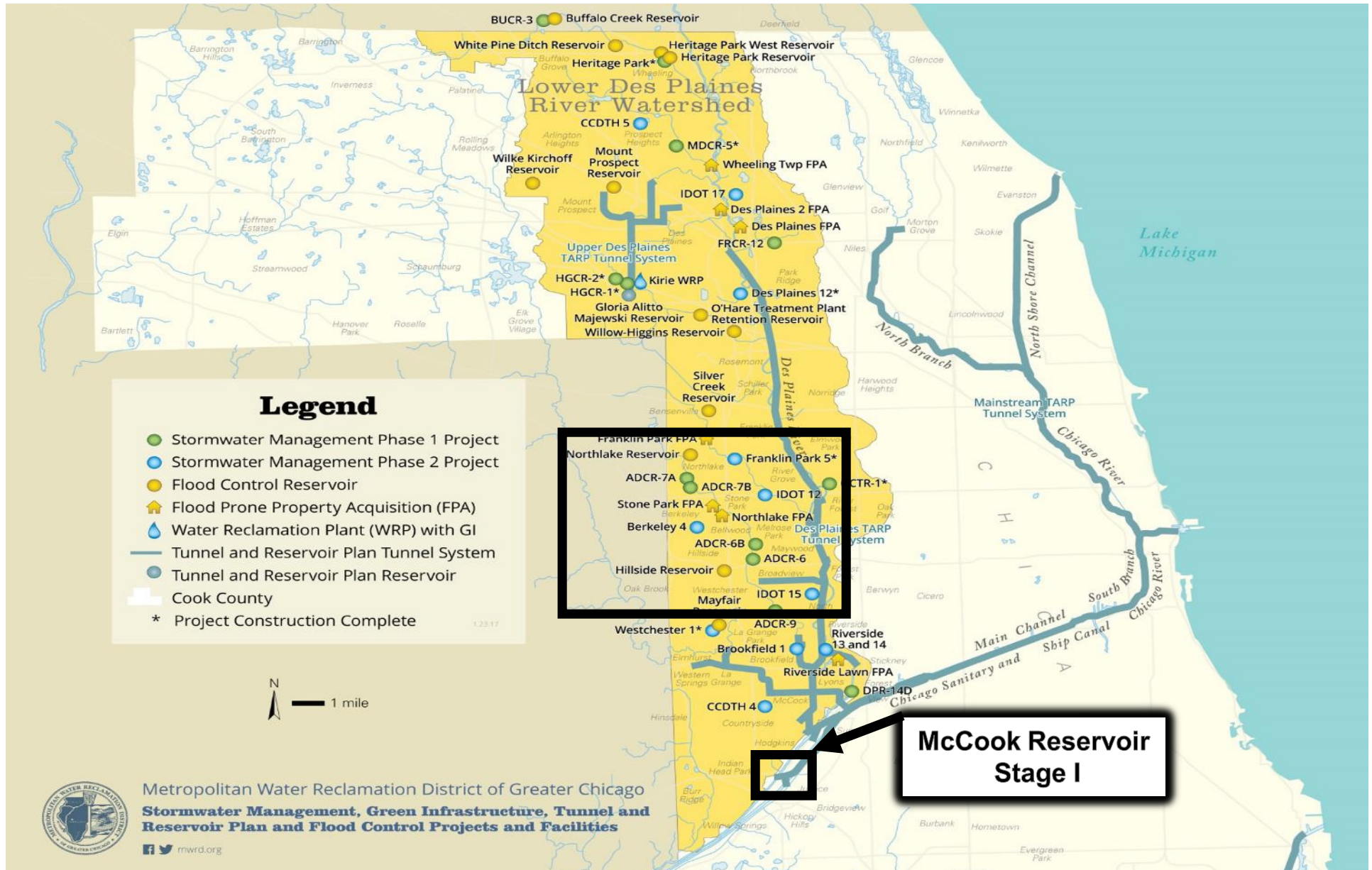


★ **Westchester Pumping Station**
1134 Gardner Road
Westchester, IL 60154



PRESENT

TARP – McCook Reservoir





PRESENT

TARP – McCook Reservoir Stage 1





PRESENT

TARP – McCook Reservoir Phase I





PRESENT

Centerpoint Preserve Riparian Area Restoration





PRESENT

Centerpoint Preserve Riparian Area Restoration



- **MAP ID:** ADCR-7B
- **Project #:** 15-IGA-13
- **Location:** Northlake, Illinois
- **Project Description:**
 - Streambank stabilization from Wolf Road to Palmer Avenue.
 - Removal of two degraded dams.
 - Riparian area restoration and wetland creation.
 - Project is addressing critical erosion threatening buildings, roads, and utilities
- **Estimated Cost:** \$3,813,870
(\$1M MWRDGC contribution)
- **Project Status:**
 - Under Construction
(app. 75% complete)





PRESENT

Northlake Flood Prone Property Acquisitions





PRESENT

Northlake Flood Prone Property Acquisitions

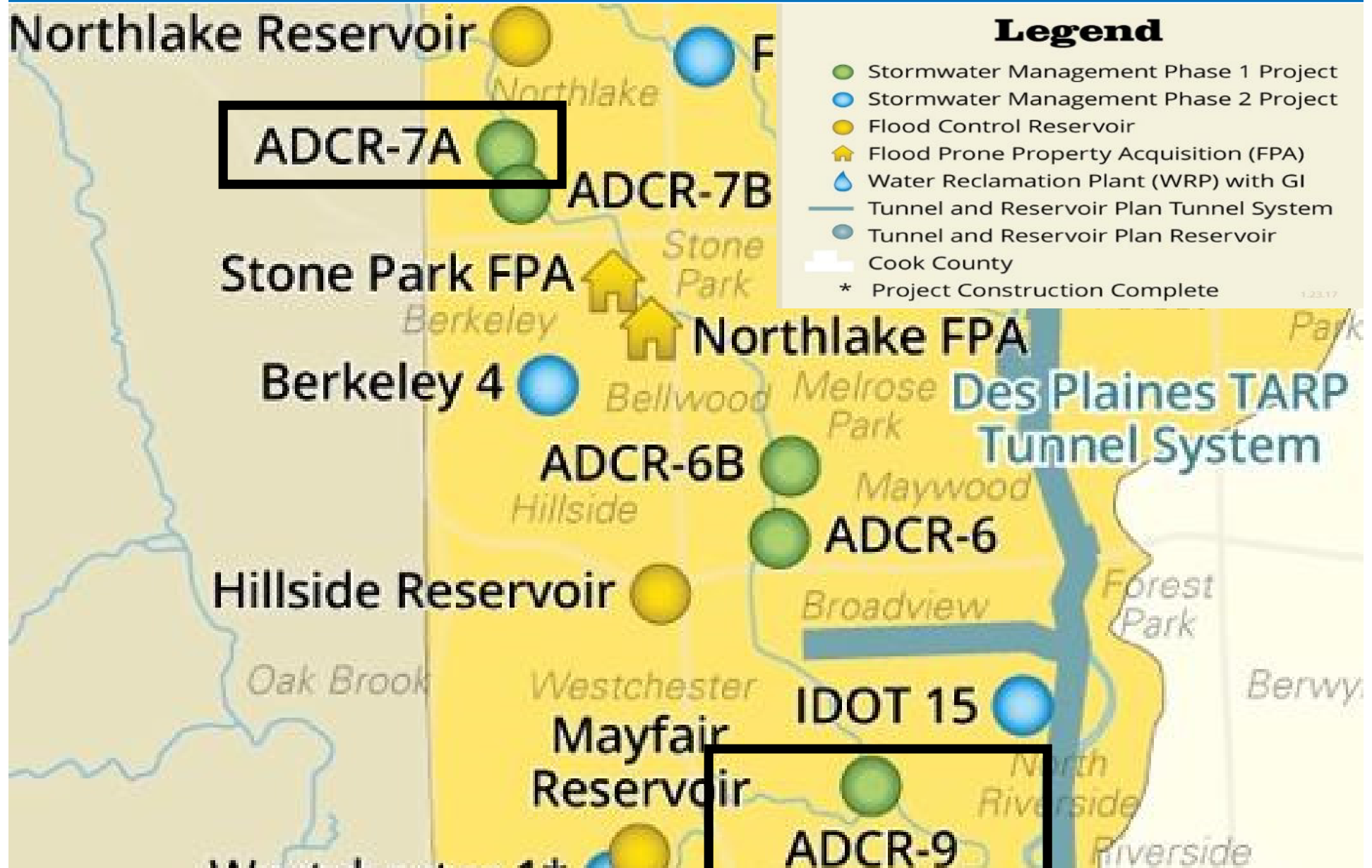
- **MAP ID:** Northlake FPA
- **Project #:** 16-IGA-14
- **Location:** Northlake, Illinois
- **Project Description:**
 - In collaboration with the City of Northlake - purchase 7 flood-prone properties along Addison Creek
- **Estimated Acquisition Cost:** \$1,184,018
MWRD – 100%
- **Project Status:**
 - Acquisitions are underway





FUTURE

Streambank Stabilization Project for Addison Creek





FUTURE

Streambank Stabilization Project for Addison Creek

- **MAP ID:** ADCR-7A, ADCR-9
- **Project #:** 14-108-3F
- **Location:** Northlake and North Riverside, Illinois
- **Project Description:**
 - 1,950 linear feet of streambank stabilization adjacent to Fullerton Avenue in Northlake
 - 410 linear feet of streambank stabilization adjacent to 19th Avenue in North Riverside
- **Estimated Cost:** \$994,100
- **Project Status:**
 - Estimate award is summer 2018





HISTORY

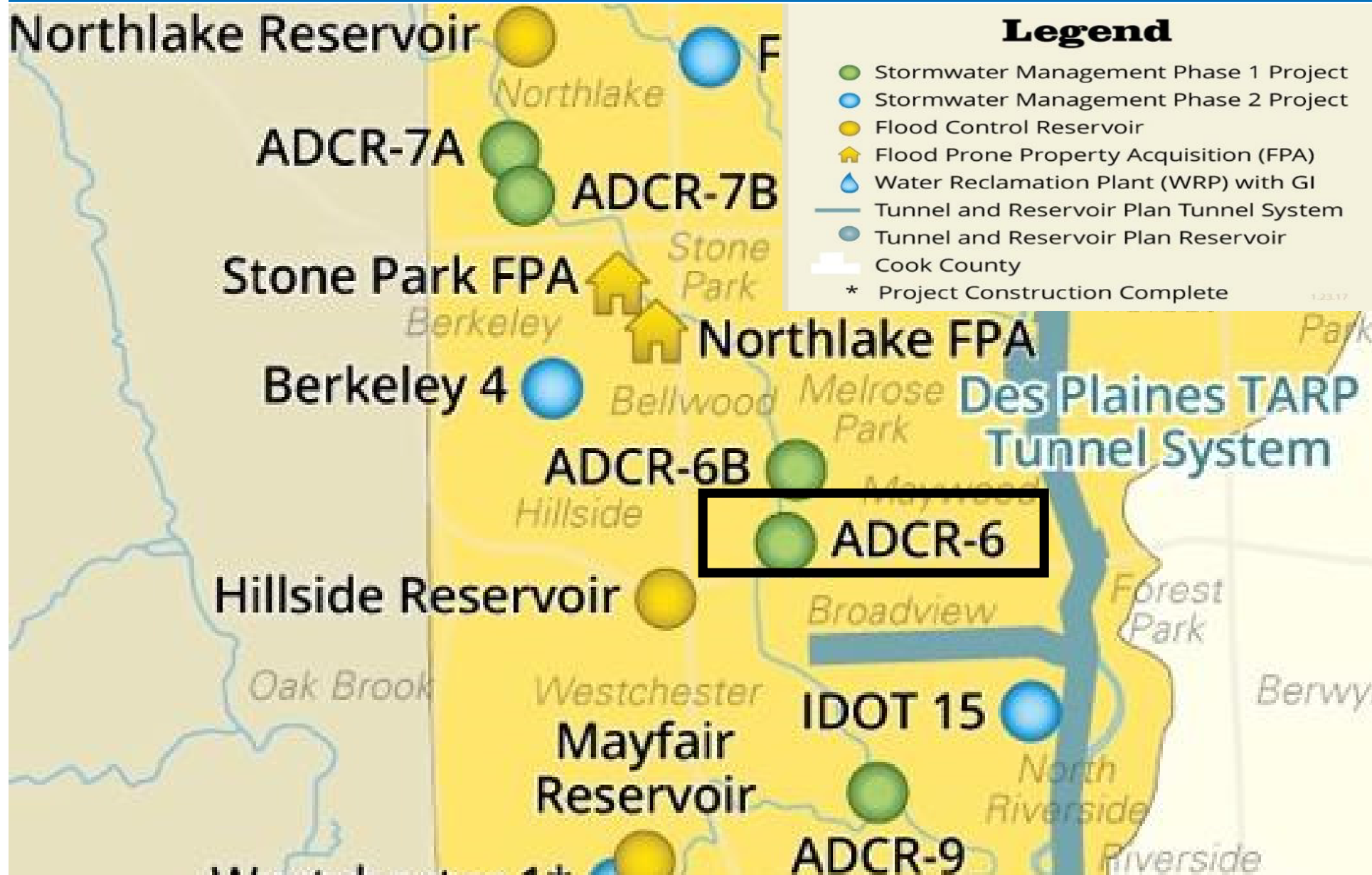
Addison Creek Reservoir

- **In 1993, IDNR-OWR's Strategic Planning Study for Flood Control Projects recommended a 480 ac-ft reservoir in Melrose Park along with channel improvements.**
- **In 2004, Addison Creek Restoration Commission (ACRC) was created. ACRC reevaluated and agreed with the IDNR-OWR 1993 recommendation. ACRC was abolished in 2015.**
- **In early 2011 MWRD completed Lower Des Plaines Watershed Detailed Plan (DWP), and the DWP recommend 960 ac-ft reservoir in Melrose Park along with channel improvements.**
- **In late 2011 Preliminary Design initiated for Melrose Park reservoir, due to landowner and constructability issues alternate site was identified by Bellwood in late 2014.**
- **In 2015, MWRD selected the Bellwood site for a proposed 600 ac-ft reservoir, and completed the preliminary design in 2016.**
- **In December 2017, the 98% Design Documents were submitted.**



FUTURE

Addison Creek Reservoir





FUTURE

Addison Creek Reservoir



- **MAP ID:** ADCR-6
- **Project #:** 11-186-AF
- **Location:** Bellwood, Illinois
- **Project Description:**
 - Demolition of remaining structures at the Addison Creek Reservoir site.
- **Construction Cost:** \$391,222.00*
- **Project Status:**
 - Award contract on 3/15/18.
 - Est. completion is this summer

* includes demolition of structures at the Thornton Reservoir site.





FUTURE

Addison Creek Reservoir



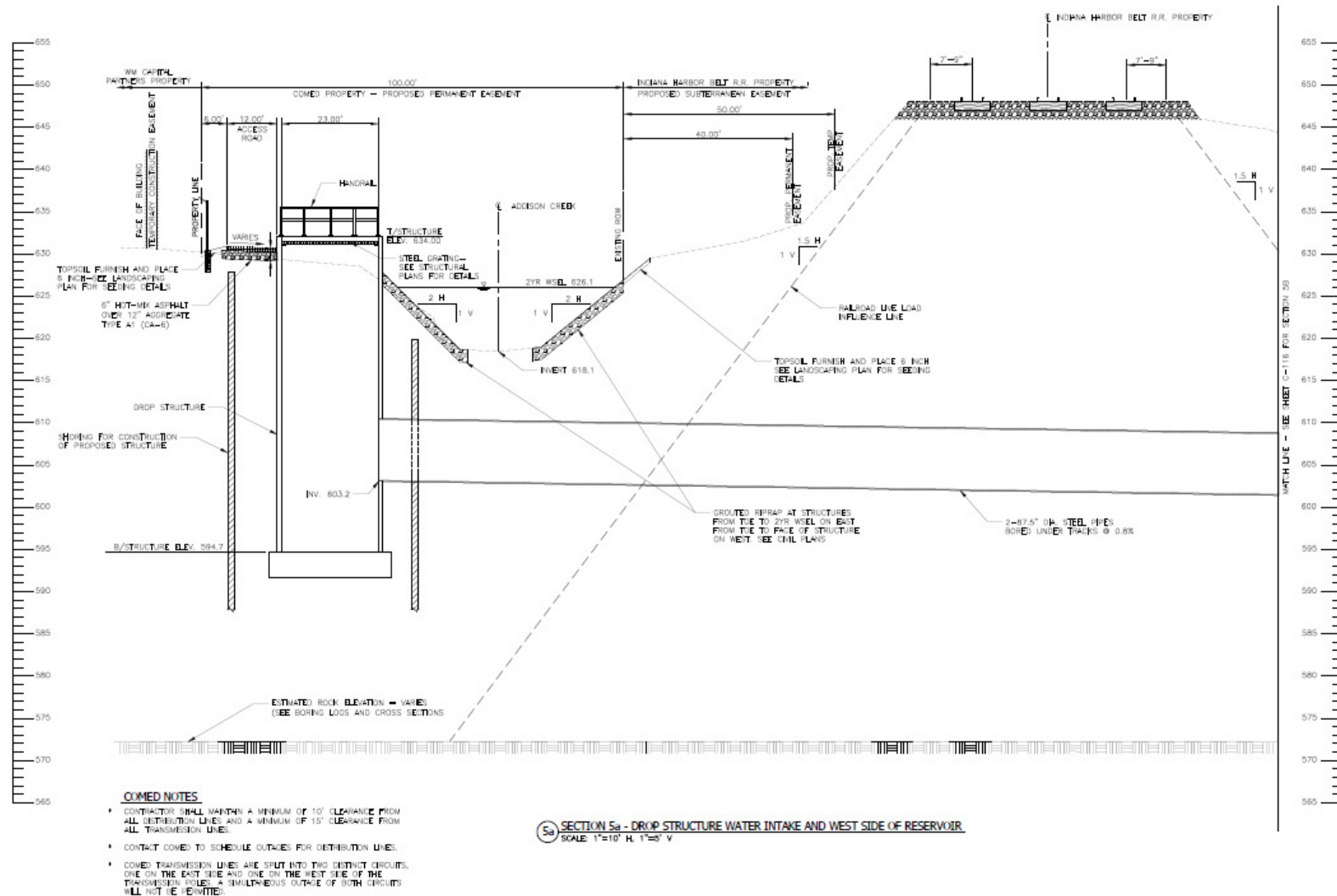
- **MAP ID:** ADCR-6
- **Project #:** 11-186-3F
- **Location:** Bellwood, Illinois
- **Project Description:**
 - 600 ac-ft reservoir
 - Reservoir and channel improvements will provide benefits to approximately 2200 structures
- **Estimated Construction Cost:** \$95.4M
- **Project Status:**
 - IGA executed
 - State Revolving Funds Approved
 - CDBG-DR funding being finalized
 - Permits obtained
 - 98% design documents submitted
 - Working to obtain remaining easements
 - Est. award is this summer 2018





FUTURE

Addison Creek Reservoir- Cross Section





FUTURE

Addison Creek Reservoir- Planned Schedule



Schedule	Activity
March 2017	Acquired Reservoir Property
Summer 2017	Site Cleanup (Separate Contract)
Winter 2017	Permits (USACE, IDNR, IEPA, SWCD)
Spring 2018	Demolition (Separate Contract)
Spring 2018	Utility Relocations
Spring 2018	Acquire Easements
Spring 2018	Finalize Bid Documents
Spring 2018	Advertise for Construction
Summer 2018	Award Construction Contract
Fall 2020	Construction Completion



FUTURE

Addison Creek Channel Improvements

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture



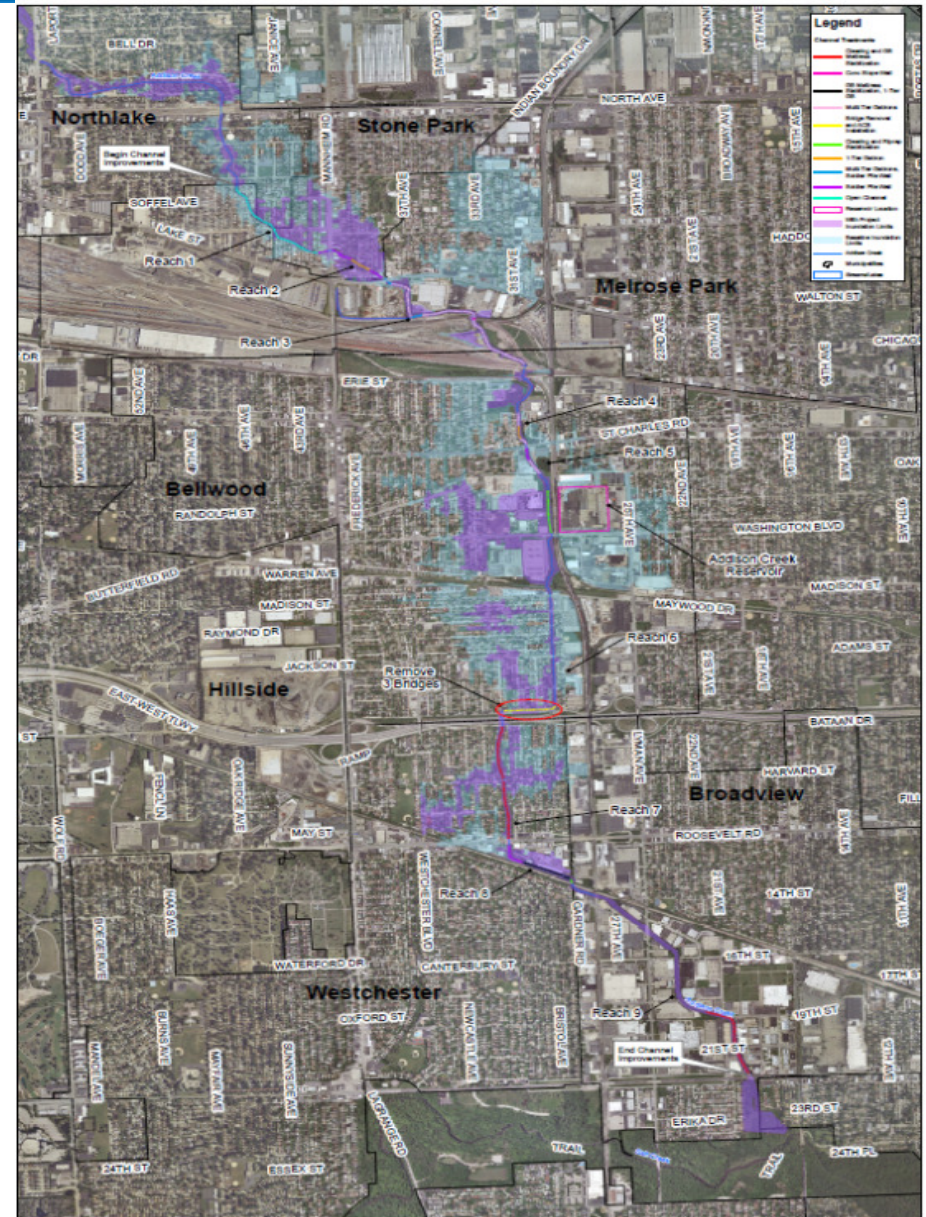


FUTURE

Addison Creek Channel Improvements

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

- **MAP ID: ADCR-6B**
- **Project #: 11-187-3F**
- **Location: Northlake, Melrose Park, Stone Park, Bellwood, Westchester, and Broadview, Illinois**
- **Project Description:**
 - Channel improvements from Northlake to Broadview
 - Removal of 3 bridges in Bellwood
 - Reservoir and channel improvements will provide benefits to approximately 2200 structures
- **Estimated Construction Cost: \$43.4 M**
- **Project Status:**
 - Final design
 - Working on permits
 - Finalizing IGAs for each village
 - Easements to be acquired
 - Est. construction award in early 2019

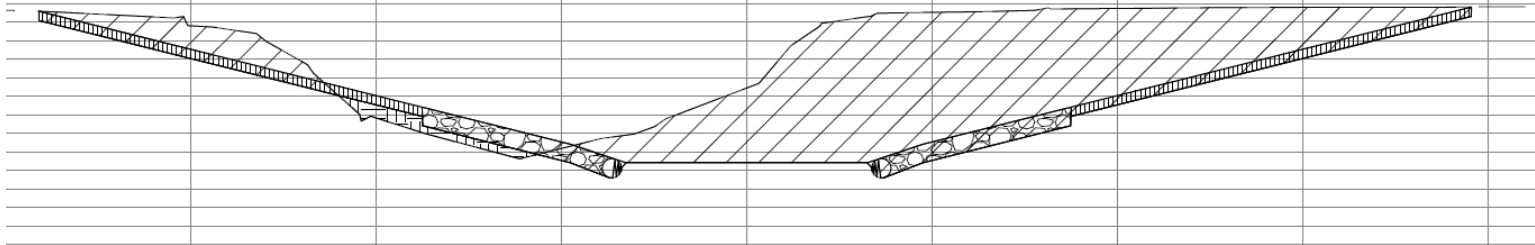




FUTURE

Addison Creek Channel Improvements

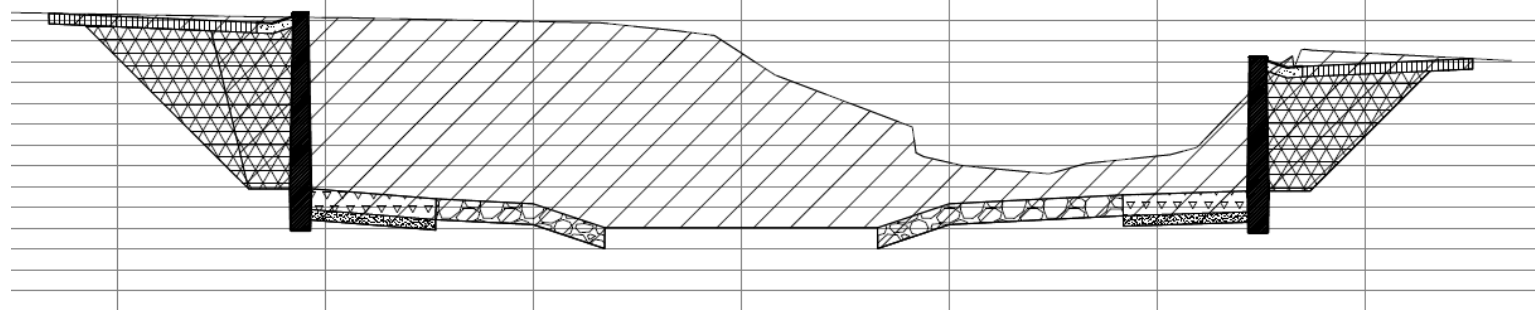
Open Channel



Gabion Baskets



Soldier Pile Walls

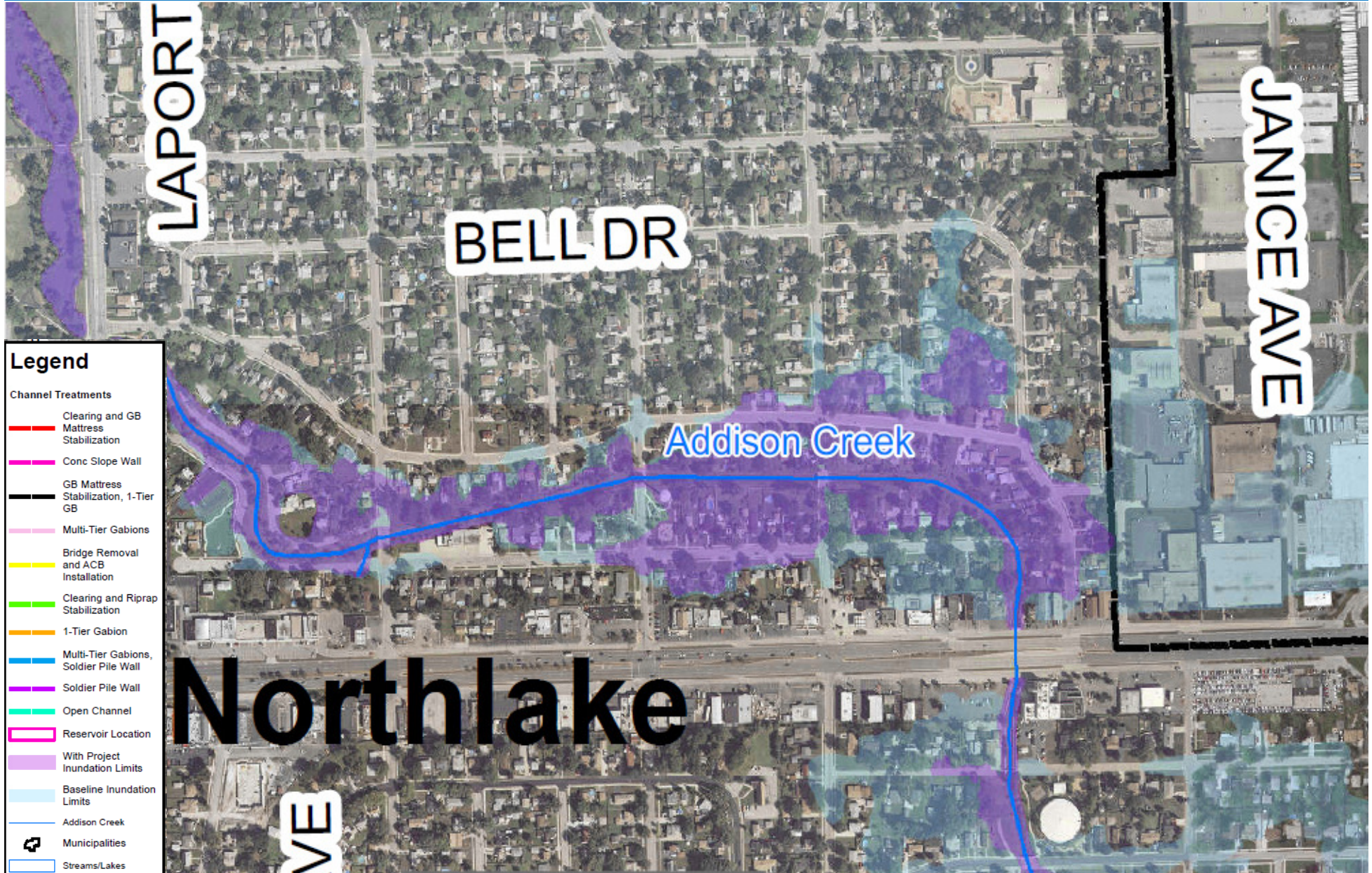




FUTURE

Addison Creek Channel Improvements

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

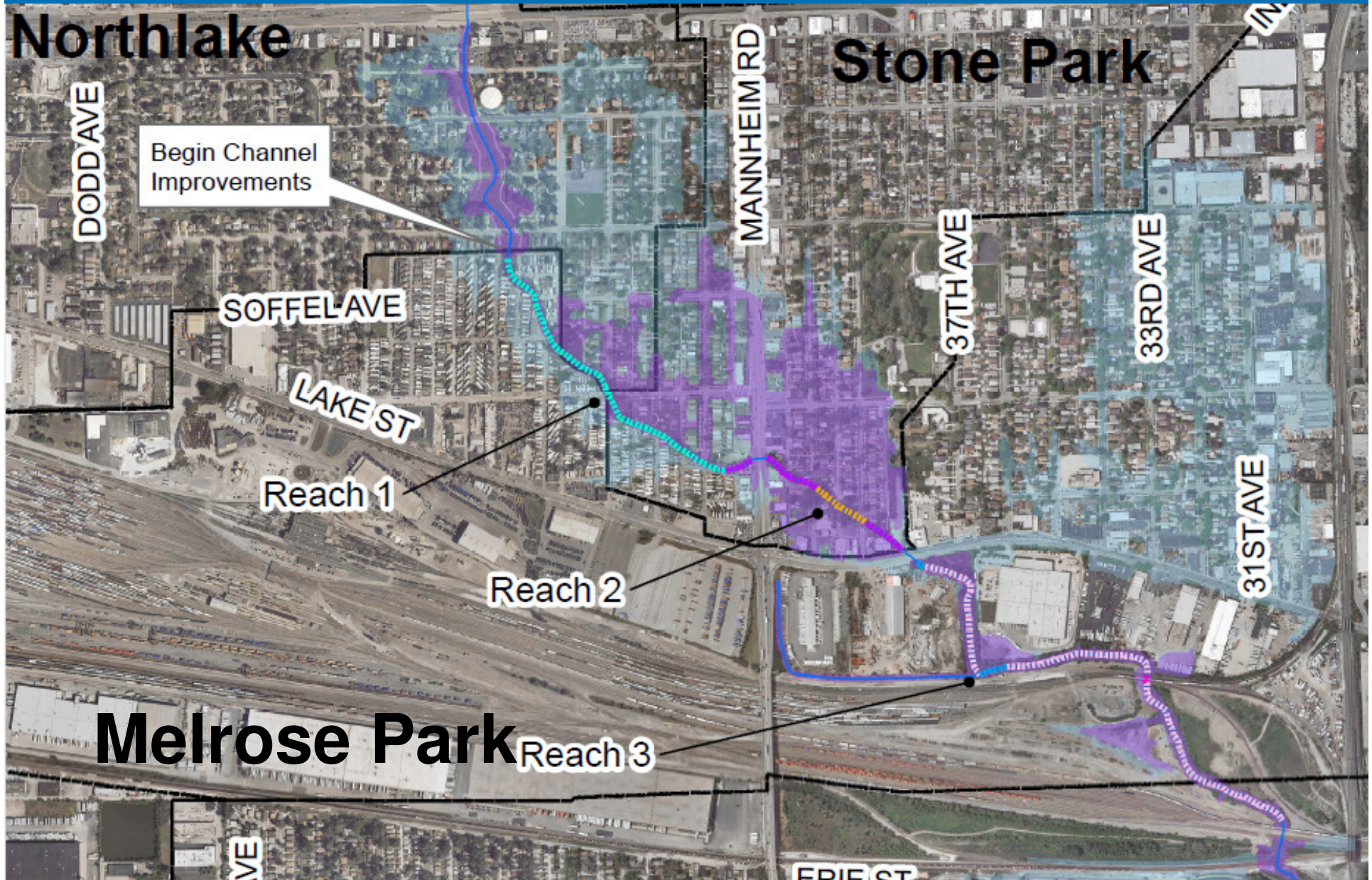




FUTURE

Addison Creek Channel Improvements

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

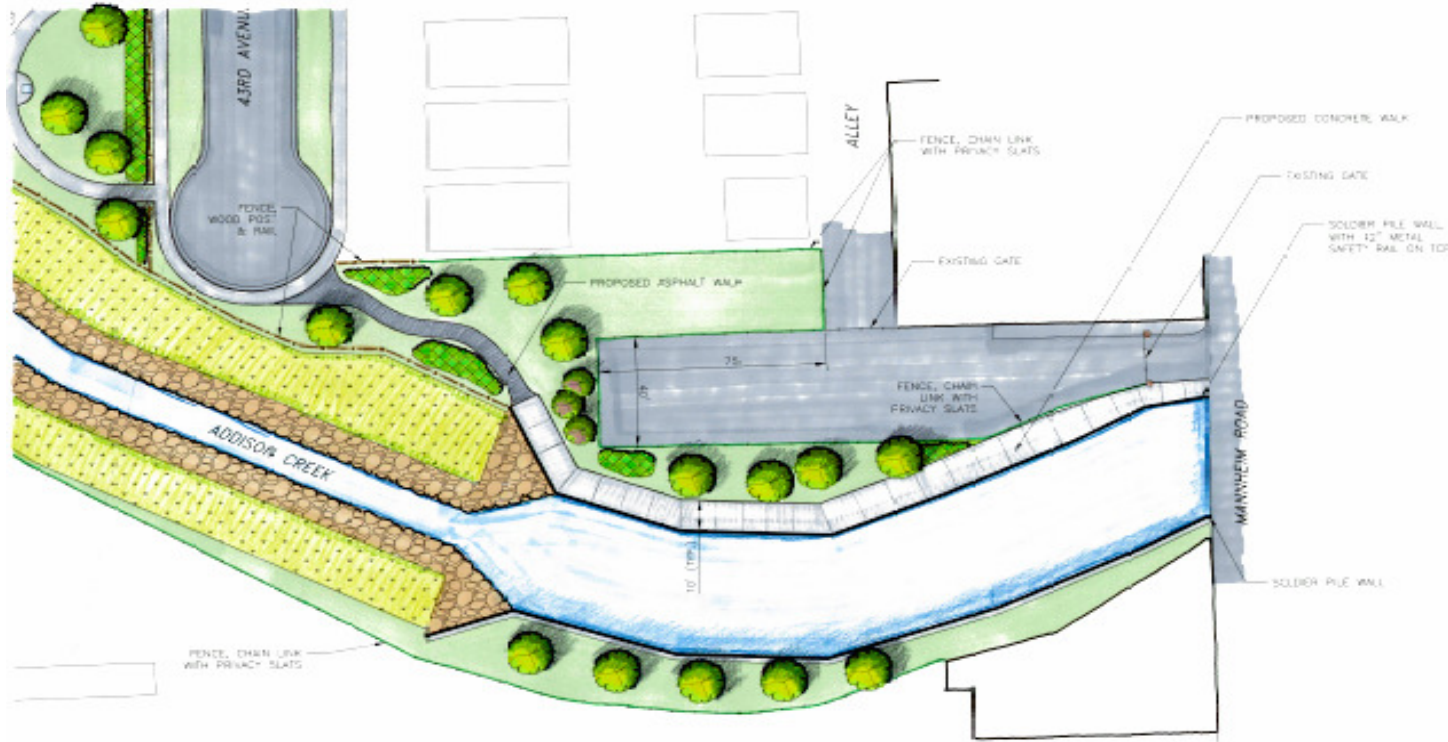




FUTURE

Jon Paul Park – Stone Park

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture



LEGEND

-  Stone
-  Stream Buffer Planting
-  Shrub/Perennial Bed
-  Tree Existing
-  Tree Shade
-  Tree Ornamental
-  Tree Evergreen



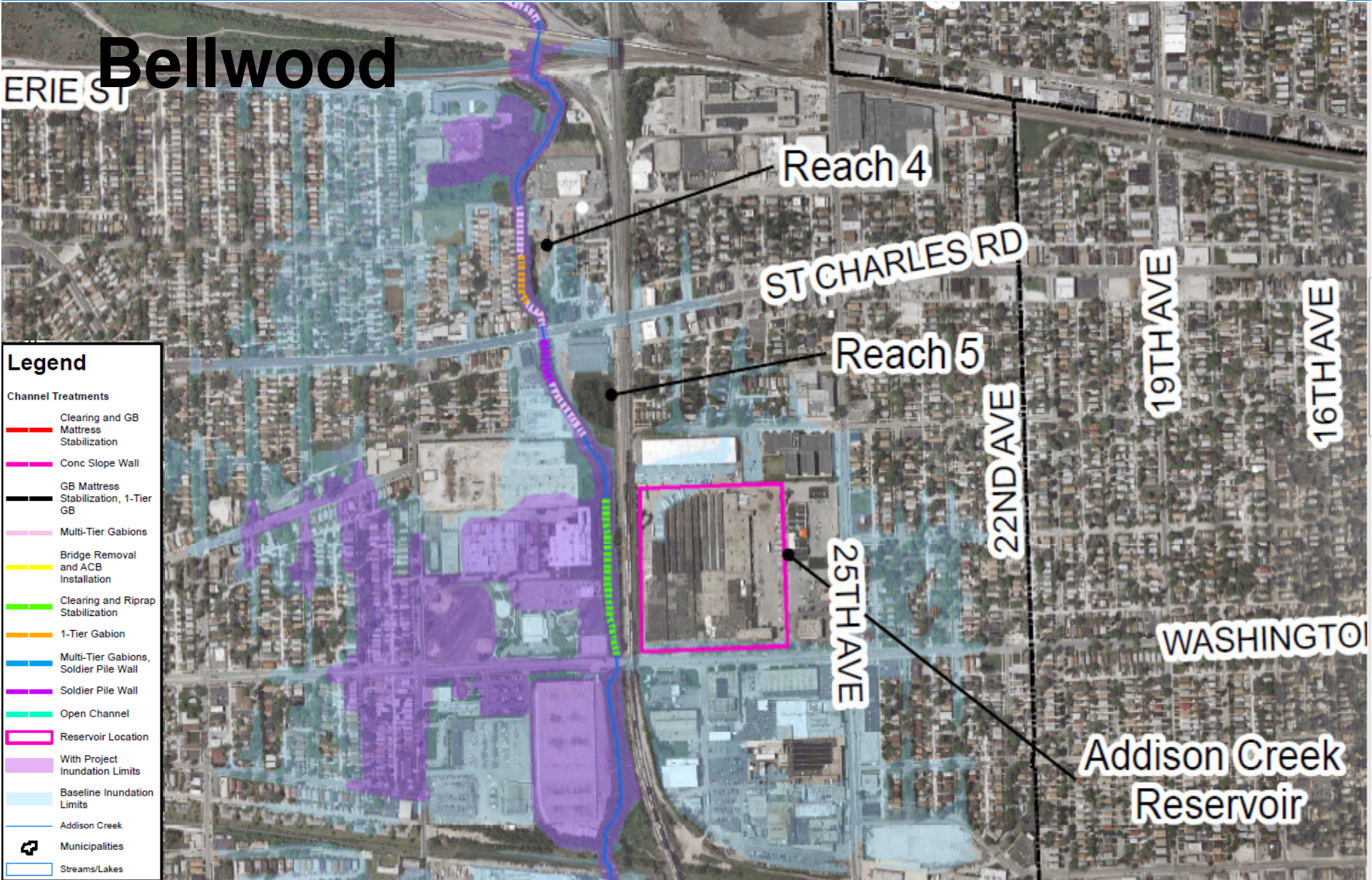
DRAFT



FUTURE

Addison Creek Channel Improvements

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

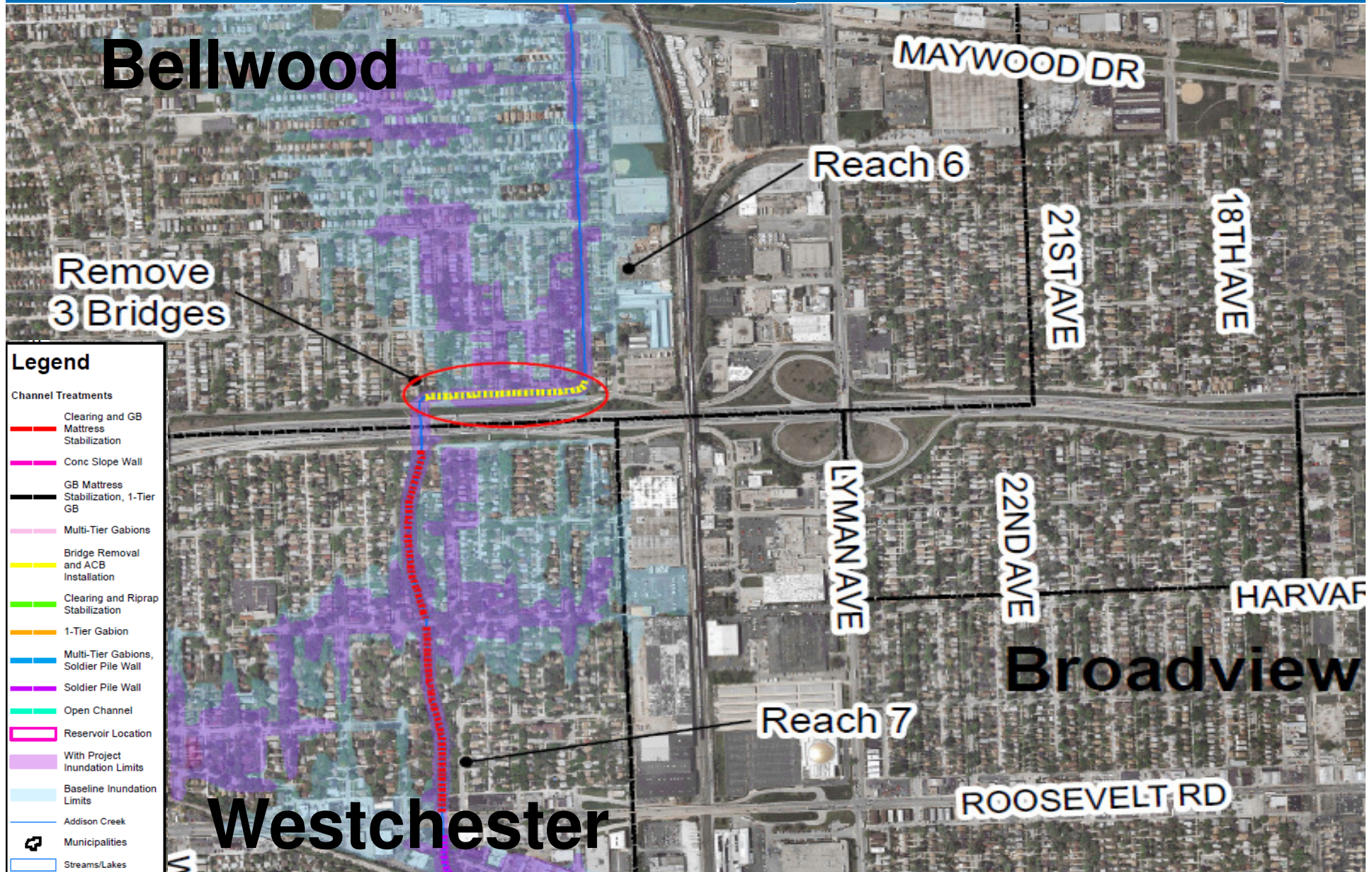




FUTURE

Addison Creek Channel Improvements

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

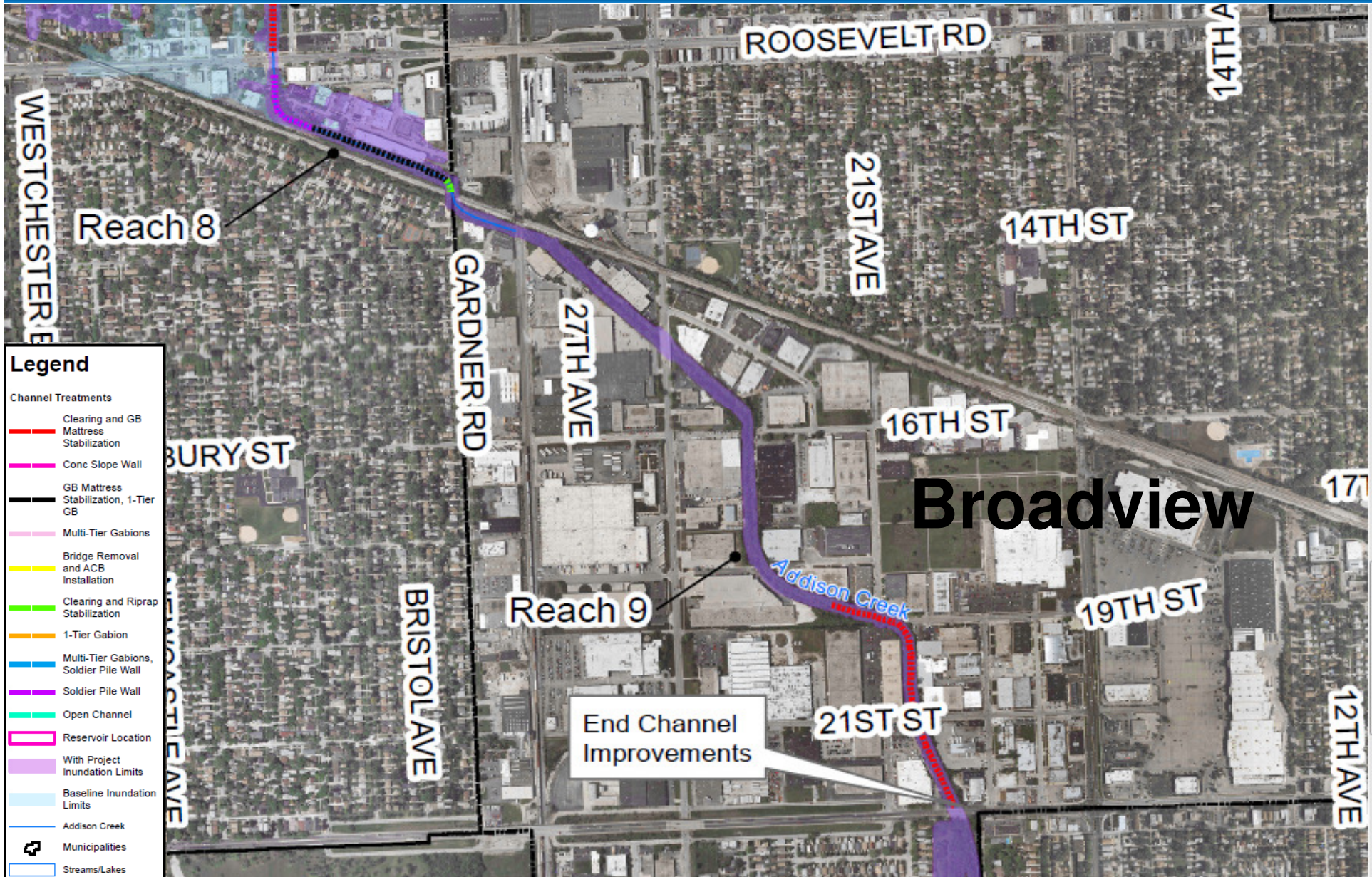




FUTURE

Addison Creek Channel Improvements

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture





FUTURE

Addison Creek Channel Improvements

Hey and Associates, Inc.
Engineering, Ecology and Landscape Architecture

Schedule	Activity
Spring 2018	Final Design
Spring 2018	Negotiate & Enter Into Intergovernmental Agreements
Fall 2018	Permits (USACE, IDNR, IEPA, SWCD)
Spring 2018 - Spring 2019	Acquire Easements
Spring 2019	Finalize Bid Documents
Spring 2019	Advertise for Construction
Summer 2019	Award Construction Contract
Summer 2021	Construction Completion



FUTURE Benefits

Community	Baseline Number of Parcels Damaged	With Project Number of Parcels Damaged	Parcels Removed from Floodplain Area	Total Baseline Damages	Total With Project Damages	Total Benefits
Broadview	2	0	2	\$73,600	0	\$73,600
Bellwood	991	188	803	\$33,490,300	\$852,150	\$32,638,150
Melrose Park	316	4	312	\$5,776,450	\$98,900	\$5,677,550
Northlake	296	78	218	\$28,494,700	\$1,991,800	\$26,502,900
Stone Park	314	131	183	\$46,437,000	\$1,637,600	\$44,799,400
Westchester	262	73	189	\$7,570,450	\$803,805	\$6,766,600
Total	2181	474	1707	\$121,842,500	\$5,384,300	\$116,458,200



Questions?

Contact Information:

Mick Cosme, PE, CFM

Senior Civil Engineer

Stormwater Management

MWRDGC

111 E. Erie St., Chicago, IL 60611

(312) 751-3092

michael.cosme@mwrdd.org

Hey and Associates, Inc.

Patrick Lach, PE, CFM

Senior Civil Engineer

(773) 693-9200

plach@heyassoc.com



Don Dressel, PE, CFM

Vice President

(847) 823-0500

ddressel@cbbel.com