



Metropolitan Water Reclamation District of Greater Chicago

Capital Improvements Program

Board of Commissioner Study Session
October 17, 2019



Catherine A. O'Connor, Director of Engineering



2019 Contract Completions

Process Enhancement

- Contract 15-122-3P Aeration Tank Air Valve Automation at SWRP \$6.7 M
- Contract 15-124-3P Conversion of Two Gravity Concentration Tanks to Primary Sludge Fermenters, SWRP \$4.1 M
- Contract 15-074-3D Provide Baffle Plates on Final Settling Tanks to Improve Effluent Quality at the O'Brien WRP \$1.4 M





2019 Contract Completions

Preservation of Infrastructure

- Contract 09-182-3E D799 Switchgear Replacement at SWRP





2019 Contract Completions

Preservation of Infrastructure

- Contract 09-182-3E D799 Switchgear Replacement at SWRP

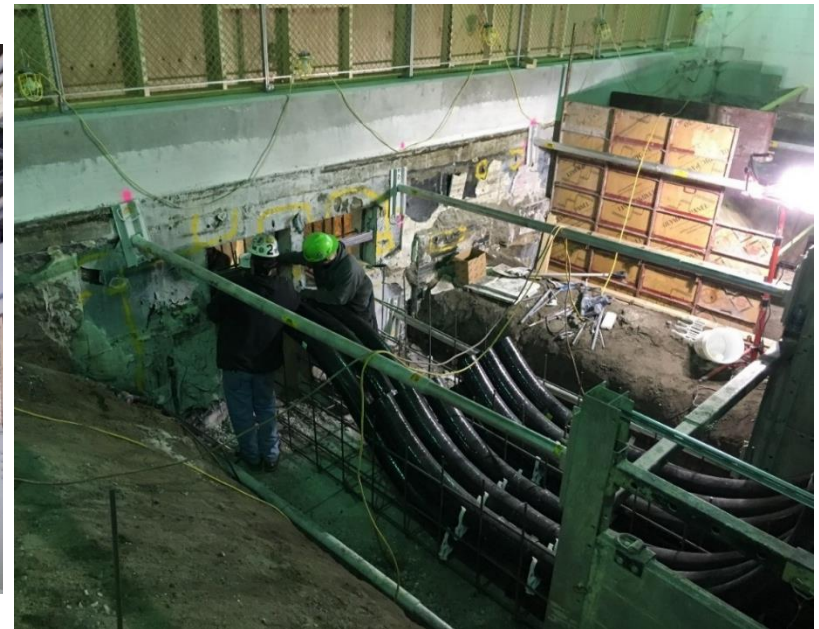




2019 Contract Completions

Preservation of Infrastructure

- Contract 16-126-3SR, Summit Conduit Rehabilitation \$2.9 M
- Contract 04-132-3D Service Tunnel Rehabilitation at SWRP \$20.9 M
- Contract 16-077-3E Electrical Switchgear Replacement at Devon Ave. Aeration Station \$0.6 M





2019 Contract Completions

Tunnel and Reservoir Plan

- Contract 16-125-4F McCook Reservoir Stage 2 Slope Stabilization and Retaining Walls \$8.8M





2019 Construction in Progress

Tunnel and Reservoir Plan

- Contract 17-842-3S Modifications to TARP Control Structures and Drop Shafts \$3.2 M
- Contract 13-106-4F Des Plaines Inflow Tunnel \$108 M





2019 Construction in Progress

Preservation of Infrastructure

- Contract 15-830-3D Replacement of Tailrace Stop Logs, Equipment, and Head Gates at the Lockport Powerhouse \$10 M

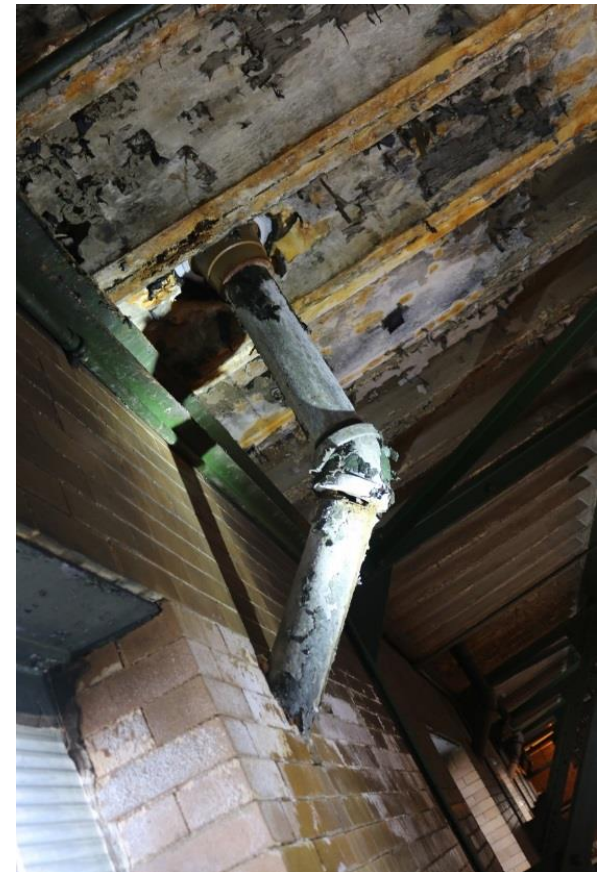




2019 Construction in Progress

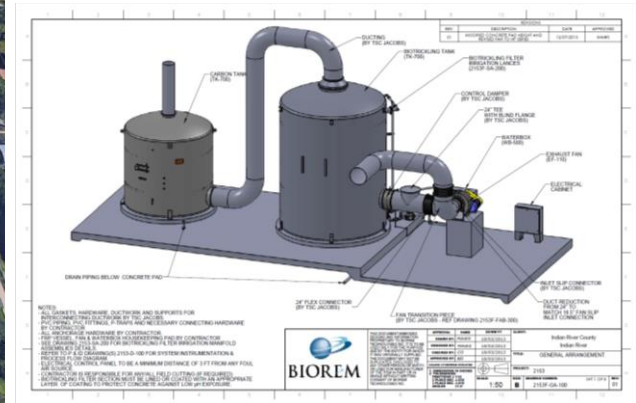
Preservation of Infrastructure

- Contract 17-276-3D Structural Repairs and Roofing Replacement at 95th Street Pumping Station \$5 M





- Contract 17-844-3P Furnish and Install Odor Control Systems at CWRP, HWRP, and KWRP \$3 M





2019 Construction in Progress

Commitment to Community

- Contract 16-IGA-22 North Branch Dam Removal and River Riparian Connectivity \$2.5 M



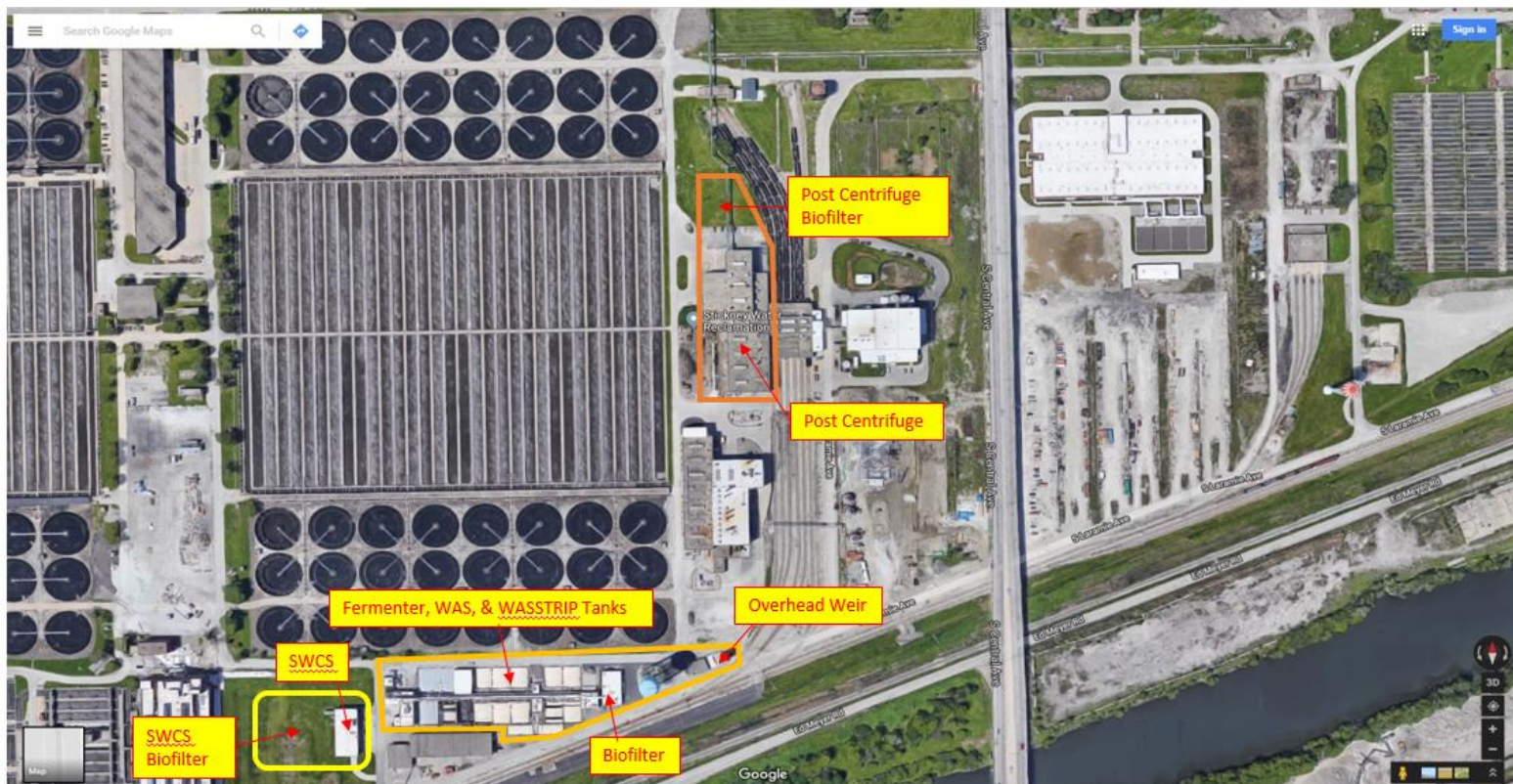


2019 Construction in Progress

Commitment to Community

- Contract 17-134-3MR Odor Control Facilities at SWRP \$15 M

Location of Biofilter Facilities for Sludge Concentration Tanks and Overhead Weir , Southwest Coarse Screen (SWCS) , and Post Centrifuge





2019 Planned Contract Awards

Commitment to Community

- Contract 15-266-4H3 Odor Control Systems at Two Shafts and Decommissioning of the Thornton Transitional Reservoir \$15.4 M





2019 Planned Contract Award

Preservation of Infrastructure

- Contract 17-140-3P Digester Rehab and Gas Piping Replacement
SWRP \$15 M

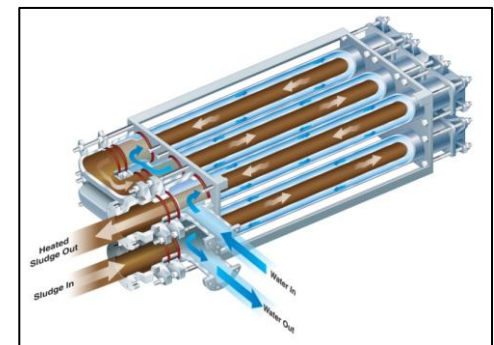
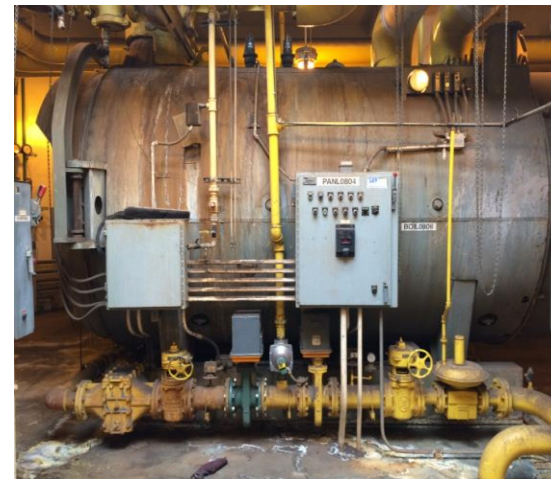
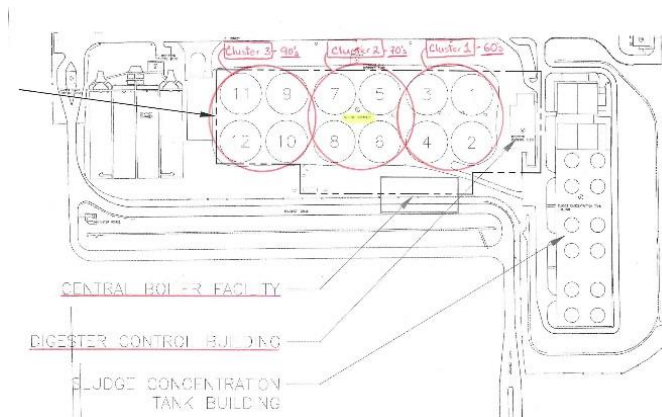




2019 Planned Contract Award

Preservation of Infrastructure

- Contract 18-277-3M Digester Sludge Heating System Upgrades and Boiler Removal CWRP \$28.5 M





2019 Planned Contract Award

Preservation of Infrastructure

- Contract 18-144-3M MSPS Pump No's 1,3, and 5 Rehabilitation \$20.5 M





2020 Initiatives

Major Planned Contract Awards

- Contract 06-360-3S Upper Des Plaines 14B Rehabilitation \$7.0 M
- Contract 14-372-3SR Drop Shaft 5 Inspection & Rehab \$4.0 M





2020 Initiatives

Major Planned Contract Awards

- 17-131-4F: McCook Reservoir Stage 2 Rock Wall Stabilization and Instrumentation \$17.3 M





17-131-4F: McCook Reservoir Stage 2 Rock Wall Stabilization and Instrumentation





2020 Initiatives

Major Planned Contract Awards

- Contract 15-069-3D Rehabilitation of Pump and Blower House
OWRP \$10 M





2020 Initiatives

Major Planned Contract Awards

- Contract 19-157-3P Installation of Mechanical Mixers, SWRP
\$11.5 M





2020 Initiatives

Major Planned Contract Awards

- Contract 16-127-3D A/B and C/D Service Tunnel Rehabilitation-Phase III at SWRP \$17 M

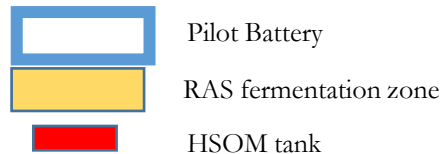
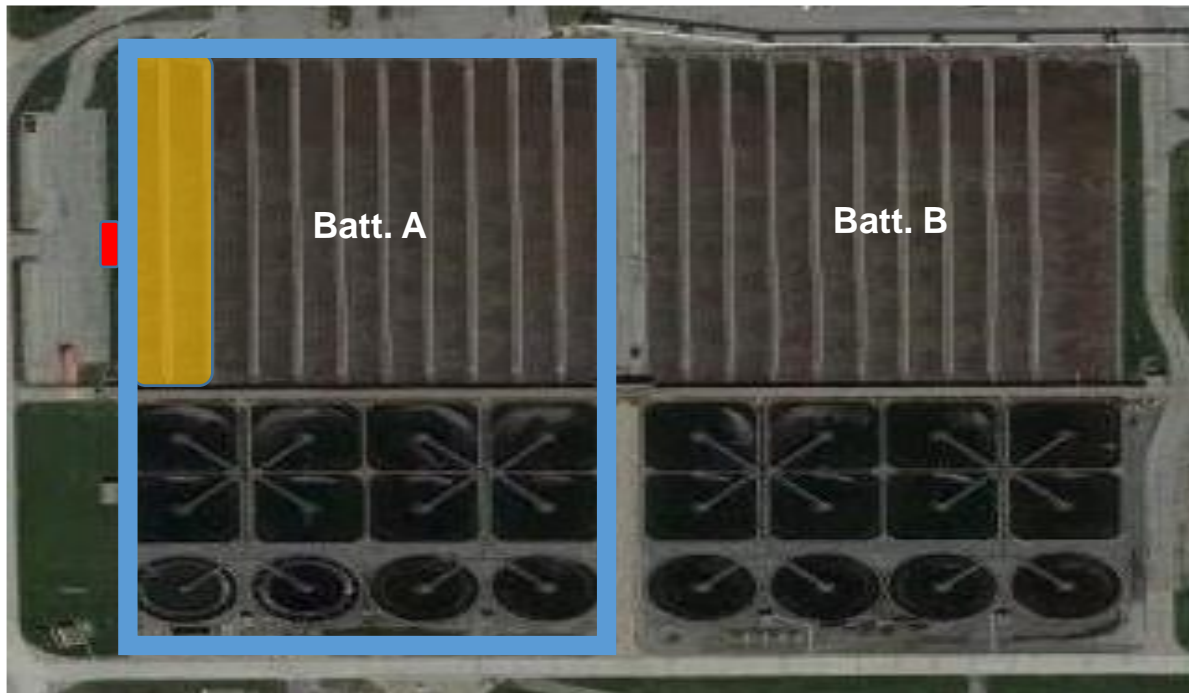




2020 Initiatives

Major Planned Contract Awards

- Contract 18-248-3P Construct Pilot Study RAS Fermentation at the Calumet WRP \$1.6 M





2020 Initiatives

Major Planned Contract Awards

- Contract 19-542-3M Central Boiler Facility and Electrical Updates at HPWRP \$14 M





Stormwater Management

Stormwater Program to Date

Program Component	Current Number of Projects	Structures Protected / Removed	Construction / Acquisition Cost (\$Million)	MWRD Cost (\$Million)
Regional Stormwater Projects (Phase I)	27	4,423	\$369	\$315
Local Stormwater Partnership Projects (Phase II)	52	>6,000	\$186	\$95
Green Infrastructure Projects	80*	2,268	\$92	\$22
Flood Prone Property Acquisitions	6	154	\$46	\$27
Totals	165	>13,000	\$692	\$471

*-includes all 34 Space to Grow projects to be completed by 2022. This does not include 20 proposed projects being recommended from our 2019 Call for GI Projects



2019 Contract Completions

Commitment to Community

- Arrowhead Lake dam, Navajo Creek \$1.6M
- Buffalo Creek Reservoir Expansion \$9.7M
- 90 Flood-Prone Properties Acquired





• Buffalo Creek Reservoir Expansion

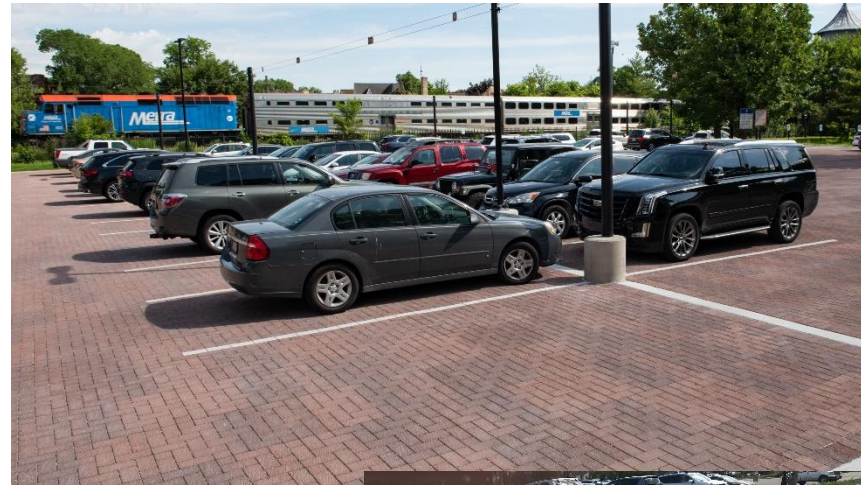




2019 Contract Completions

Commitment to Community

- Completion of Green Infrastructure (GI) partnership projects:
 - Arlington Heights
 - Des Plaines
 - Forest Park
 - Forest Preserve District of Cook County
 - Chicago Park District (2 projects)
 - Harwood Heights
 - Maywood
 - River Forest
 - Riverside
 - Wheeling Park District
 - Broadview
 - La Grange
 - Tinley Park





2019 Contract Completions

Commitment to Community

- Streambank Stabilization on Addison Creek \$1.5M



- Continued Space to Grow program partnership
 - 5 schoolyard transformations to be completed in 2019
 - Arthur R. Ashe Elementary
 - Ninos Heroes Elementary
 - Henry H. Nash Elementary
 - Daniel Webster Elementary
 - Oliver S. Westcott Elementary





2019 Construction in Progress

Commitment to Community

- Melvina Ditch Reservoir Expansion – Burbank and Oak Lawn, \$14.2M
- Flood Control Project on Natalie Creek – Midlothian & Oak Forest, \$7.6M





Addison Creek Reservoir Construction





2019 Stormwater Partnerships

Commitment to Community

- 2019 Solicitations for Green Infrastructure, Local Stormwater Partnership Program (formerly Phase II), and Flood-Prone Property Acquisition Projects
 - Received 41 Green Infrastructure Project Applications
 - Call for Local Stormwater Partnership Projects and Flood-Prone Property Acquisition Projects in late 2019 (being coordinated with FEMA/IEMA funding opportunities)



2020 Initiatives

Major Planned Stormwater Contract Awards

- Addison Creek Channel Improvements \$42.6M
- Midlothian Creek Flood Control Project in Robbins, \$11M
- Streambank Stabilization along Melvina Ditch in Chicago Ridge and Oak Lawn, \$11.4M
- Flood Control Project in the vicinity of 135th St. & Central Ave. in Crestwood, \$9.3M
- Streambank Stabilization along Calumet Union Drainage Ditch in Markham, \$1.6M



Current Contract Statistics

Project Phase	Number of Contracts	Percent of Original Budget	Percent of Original Contract Time
Construction	19	101.8%	124%
Contract Closeout	12	104.7%	121%
Substantially Complete	4	102.3%	107%
Overall	35	102.8%	121%



Metropolitan Water Reclamation District of Greater Chicago

2020 Capital Improvements Program

