# **Metropolitan Water Reclamation District of Greater Chicago**

#### **Committee on Budget and Employment**

Honorable Kari K. Steele, Chairperson

**Budget Considerations:** Session 2 – Capital Improvement Program

June 1, 2017

# 2018 Budget Considerations

**Budget Considerations** 

- Three Budget Sessions
  - Session 1: Financial Overview
  - Session 2: CIP Fund and Stormwater
  - Session 3: Resource Recovery and Strategic • Plan Goals

#### 2018 Budget Considerations

### **Budget Considerations**

- Quick Review
- · Projects in progress
- FY17 Proposed Projects
- FY18 Proposed Projects

# 2018 Budget Considerations

**Quick Review** 

#### 1 2018 Budget Considerations

## Bond Redemption and Interest / Stormwater Summary

- Dedicated Funding Sources
- Solid Financial Models .
- . Sustainable Investment Over Time - \$250 M/Year
  - Program Elements Include
  - Regulatory Demands
  - Rehabilitation and Renewal Projects •
  - Value Added Projects
  - Stormwater

## 2018 Budget Considerations

### Bond Redemption and Interest

#### Strategic Plan Objectives:

**Regulatory Issues** 

- · Goal 1: Add Value
  - Customer Service
    - · Develop and implement targeted odor control strategies
- Goal 3: Resource Recovery Phosphorus
  - Implement recovery process at the Stickney WRP by 2016
  - Implement recovery process at the Calumet and Egan WRPs by 2022
  - Explore algae nutrient reduction processes at O'Brien WRP

#### Bond Redemption and Interest

### Strategic Plan Objectives:

Sustainable Program

- Goal 2: Excellence
  - Finances
    - Continue the prioritization of projects to ensure best use of capital spending
  - · Manage resources to ensure financial stability targets are met Sense of Urgency
    - Establish excellence in maintenance and operations
    - Expedite capital improvement program projects in design, bid, contract award and construction schedule

# 2018 Budget Considerations

## Stormwater and CIP Strategic Plan Ties

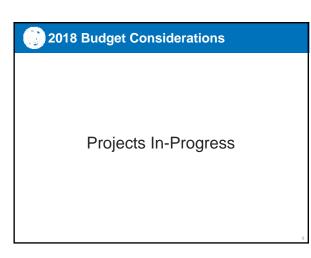
#### Strategic Plan Objectives

Goal 1: Add Value

- Customer Service
  - Develop and implement effective flood mitigation programs for our customers
  - Structure a multi-dimensional, culture changing strategy around GI

### Goal 2: Excellence

- Sense of Urgency .
  - Deliver and implement flood relief plan for Cook County



# 2018 Budget Considerations

### Regulatory

Final Completion			
TARP Control Structure Rehabilitation, NSA, SSA, CSA			
Substantially Complete			
Connecting Tunnels and Gates, Thornton Composite Reservoir, CSA			
Disinfection Facilities, NSWRP			
Final Reservoir Preparation, Thornton Composite Reservoir, CSA			
Under Construction			
Calumet TARP Pump Station Improvements, CWRP			
Conversion of Old GCTs to the WASSTRIP Process, SWRP			
McCook Reservoir Des Plaines Inflow Tunnel			
Phosphorus Recovery System, SWRP			
West Side Primary Settling Tanks 1-9 and Aerated Grit Facility, SWRP			
Project Related Work In-Progress			
Connecting Tunnels & Gates, Thornton Composite Reservoir, CSA - Professional Post Award Services			
Covered Composting System Design Services, CWRP			
Conversion of Primary Tanks to High Strength Waste Receiving and Distribution, CWRP – Design and Evaluation			
Disinfection Final Design and Post Award, NSWRP			

# 2018 Budget Considerations

### Regulatory (Cont.)

- Project Related Work In-Progress Final Reservoir Preparation, Thomton Composite Reservoir, CSA Post Award and Professional Engineering Design and Post Award Services for Thornton Composite Reservoir Surface Aeration, CSA

- Reservoir Sufrace Aerauon, CSA
  McCook CUP Reservoir Stages 18.2, McCook MWRD 25% Contribution
  McCook Reservoir Des Plaines Inflow Tunnel Post Award Services
  McCook Reservoir Vulcan Agreement Hard Costs
  Phosphorus Recovery System, SWRP Professional Services
  Post Award Services for Calumet TARP Contracts 06-212-3M and 12-RFP-05
  Tollway Dam, Grout Curtain & Quarry Plugs, Thornton Composite Reservoir, CSA Post
  Award Services MWH
- Ward Services MWH West Side Primary Settling Tanks 1-9 and Aerated Grit Facility, Stickney WRP Final Design and Post Award Services

2018 Budget Considerations	
Rehabilitation	
Final Completion	
Battery C Airlift & Air Main Rehabilitation / Aeration Tanks No. 6, 7, 8 Diffuser Plate Replacement, SWRP	
Coarse Screens and RSP Slide Gates Replacement, EWRP	
Rehabilitation of the A/B and C/D Service Tunnels - Phase One, SWRP	
Substantially Complete	
Centrifuge Building and Sludge Loading System Upgrades, EWRP and HPWRP	
Des Plaines River Intercepting Sewer Rehabilitation, SSA	
Glenbrook Sanitary Sewer Rehabilitation, NSA	
Under Construction	
A/B & C/D Service Tunnel and Connecting Tunnel Rehabilitation - Phase II, SWRP	
Aeration Tanks Air Valves Automation in Batteries A, B, C and D, SWRP	
Calumet Intercepting Sewer 19F Rehabilitation, CSA	
Calumet TARP Screens, CWRP	
D799 Switchgear Replacement, SWRP	
Main Sewage Pump Seal Water System Modification, MSPS	
Safety Railing Around Tanks, CWRP	
Safety Railing Around Tanks, OWRP	
Safety Railing Around Tanks, Stickney WRP	
Salt Creek Intercepting Sewer 2 Rehabilitation, SSA	
TARP Pump #8 Rehabilitation, MSPS	12

#### Value Add

Energy Neutral Final Completion Nitrogen Removal in Centrate, Egan WRP

Project Related Work In-Progress Energy Neutrality Feasibility Study at the Egan and Hanover Park WRPs

ormwater Bond Fund
GAs
Acquisition of Flood Prone Properties Flossmoor (2 homes)
Acquisition of Flood Prone Properties Franklin Park (32 homes)
Acquisition of Flood Prone Properties Northlake (8 homes)
Acquisition of Flood Prone Properties Stone Park (35 homes)
Acquisition of Flood Prone Properties Wheeling Township (6 homes)
Acquisition of Flood Prone Properties Des Plaines (49 homes)
Acquisition of Flood Prone Properties Riverside-Lawn (39 homes)
Acquisition of Flood Prone Properties Along Des Plaines River (13 Homes
Riverside-Phase 2 IGA
Glencoe-Phase 2 IGA
CCDTH 2 - Phase 2 IGA
Elk Grove Village 1 - Phase 2 IGA
Franklin Park 5 - Phase 2 IGA
Lansing - Phase 2 IGA
Niles 1 - Phase 2 IGA
Northbrook 2 and 5 - Phase 2 IGA
Stormwater Retrofits for Wescott Park Northbrook
Wilmette Green Alleys - Complete
Prairie/Washington PS Improvements Brookfield

#### 2018 Budget Considerations

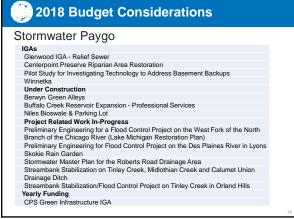
#### Stormwater Bond Fund (Cont.)

Under Construction

- Albany Park Stormwater Diversion Tunnel Streambank Stabilization Project for the West Fork of the North Branch of the Chicago River
- Fload Control Project on East Branch of Cherry Creek in Flossmoor, IL Streambank Stabilization Project on Oak Lawn Creek Project Related Work In-Progress

- Project Related Work In-Progress Final Design Engineering for Addison Creek Channel Improvements Final Design Engineering for Addison Creek Reservoir Final Design Engineering for Lyons Levee Flood Control Improvements Design of Flood Control Project for the Melvina Ditch Watershed Design of Flood Control Project on Midlothian Creek in Robbins, IL Design of Flood Control Project on Midlothian Creek in Midlothian, IL Glenwood IGA for floodwall at Arquilla Park

- Final Design for Stormwater Retrofits for Real Time Controls and Rainwater Harvesting System at Dearborn Homes



#### 2018 Budget Considerations ŝ

# FY17 Proposed Projects

# 2018 Budget Considerations

## Regulatory FY2017 Projects

Construction

2 Slope Stabilization and Retaining Walls McCook Reservoir Conversion of Primary Tanks to High Strength Waste Receiving and Distribution, CWRP

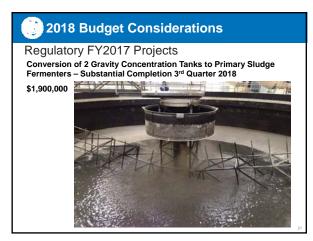
Conversion of Two Gravity Concentration Tanks to Primary Sludge Fermenters, SWRP

Covered Composting System, CWRP Furnish, Deliver, and Install Odor Control Systems, HPWRP













Substantial Completion 4rd Quarter 2018

# 2018 Budget Considerations

## Rehabilitation FY2017 Projects

- Design Devon IAS Switchgear Replacement and Wilmette PS Conduit Replacement
- Drop Shaft 5 Inspection and Rehabilitation F&D One Volute Dewatering Press, SWRP F&D Telemetry replacement for SCADA Control at Various Locations F&D Windrow Turner, Biosolids Management

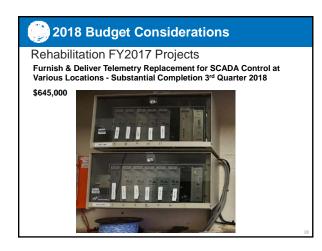
- FD&I Boiler Controls, SWRP FD&I Disc Filters, HPWRP
- FD&I Grit Screw Conveyors, SWRP
- FD&I Upgraded Sludge Concentration Conveyor, CWRP Installation of Baffle Plates in Final Settling Tanks, OWRP Painting of Final Tanks, Districtwide
- Painting of Final Faints, Districtive Pump Rehabilitation and Diverter Gate Installation, EWRP Rehabilitation of North Branch Pumping Station, NSA Structural Repairs and Roofing Replacement at 95th Street Pumping Station



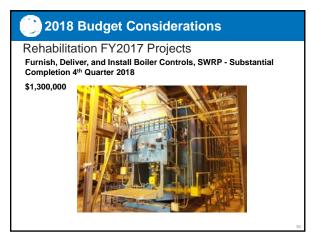














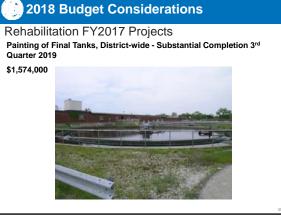






Rehabilitation FY2017 Projects Installation of Baffle Plates in Final Settling Tanks, OWRP -Substantial Completion 1<sup>st</sup> Quarter 2019 \$1,600,000





# 2018 Budget Considerations

Rehabilitation FY2017 Projects Pump Rehabilitation and Diverter Gate Installation, EWRP -Substantial Completion 2<sup>nd</sup> Quarter 2018 \$250,000



Rehabilitation FY2017 Projects Rehabilitation of North Branch Pumping Station, NSA- Substantial Completion 1st Quarter 2019 \$1,500,000





Structural Repairs and Roofing Replacement at 95<sup>th</sup> Street Pumping Station,- Substantial Completion 2<sup>nd</sup> Quarter 2018 \$1,866,000



# 2018 Budget Considerations

## Value Add FY2017 Projects

- Resource Recovery On Hold Organic Waste Receiving Facility and Digester Gas Flare Upgrade, CWRP Construction
- Fertilizer Offtake Related to the Phosphorus Recovery System, CWRP Stickney Effluent Reuse Line, SSA Fischer Farms Horticultural Center, HPWRP

# 2018 Budget Considerations

Value Add FY2017 Projects Organic Waste Receiving Facility and Digester Gas Flare Upgrade, CWRP- Substantial Completion 2<sup>nd</sup> Quarter 2018 \$8,426,000





#### 2018 Budget Considerations 1

Value Add FY2017 Projects

Stickney Effluent Reuse Line, SSA,- Substantial Completion 3rd Quarter 2018

\$800,000



# 2018 Budget Considerations

Value Add FY2017 Projects Fischer Farms Horticultural Center, HPWRP,- Substantial Completion 4th Quarter 2017





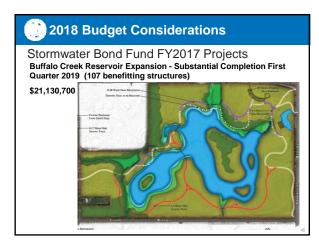
## Stormwater Bond Fund FY2017 Projects

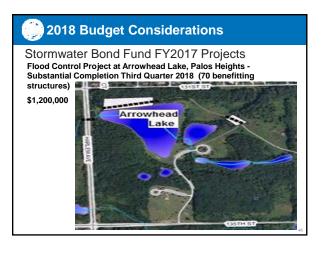
#### IGAs IGA. Oak Lawn Phase II

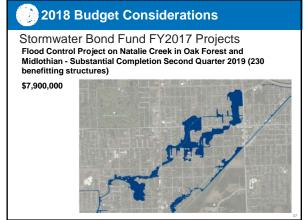
- Chicago Park District Parjana Crestwood 2 Phase II IGA Construction
- Addison Creek Reservoir Buffalo Creek Reservoir Expansion Flood Control Project at Arrowhead Lake in the City of Palos Heights, IL
- Flood Control Project an Natalie Creek in Midlothian, IL Melvina Ditch Reservoir Improvements Streambank Stabilization along Midlothian Creek

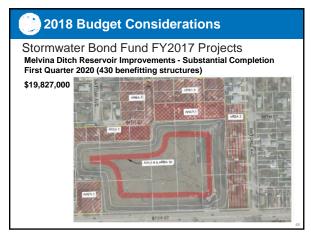
- Streambank Stabilization Project on Melvina Ditch Streambank Stabilization Projects for Addison Creek Cook County Masterplan

2018 Budget Considerations Stormwater Bond Fund FY2017 Projects Addison Creek Reservoir - Substantial Completion Fourth Quarter 2019 (2,200 benefitting structures) \$109,542,000 西田 BUN





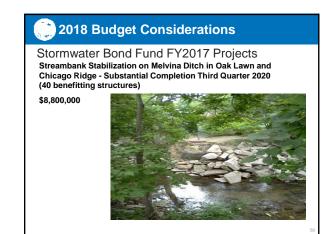


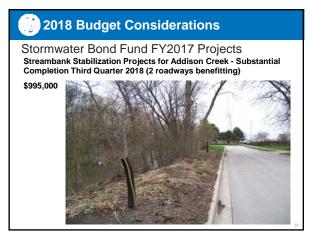


Stormwater Bond Fund FY2017 Projects Streambank Stabilization Project along Midlothian Creek, Tinley Park - Substantial Completion Third Quarter 2018 (Multi-family structure protected)

\$392,000







# 2018 Budget Considerations

## Stormwater Paygo FY2017 Projects

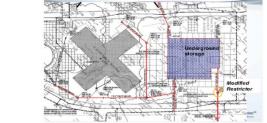
#### Construction

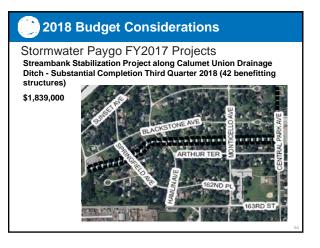
- Stormwater Retrofits for Real Time Controls and Rain Water Harvesting at Dearborn Homes
- Streambank Stabilization Project Along Calumet Union Drainage Ditch Project Related Work In-Progress
- Flood Control Project in Washington St. Area in Blue Island Final Design
- Flood Control Project 135th St. & Central Ave. in Creatwood, IL Final Design Flood Control Project Worth Woods Subdivision in Worth, IL Final Design Flood Control Project on Cal-Sag Trib C in Bremen and Midlothian Final Design

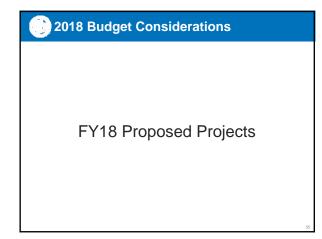
### Stormwater Paygo FY2017 Projects Rainwater Harvesting System at Dearborn Homes, Chicago -Substantial Completion Third Quarter 2018 \$1,152,000 Dearborn Homes - Design Concept Retrofit with real time control

2018 Budget Considerations

1







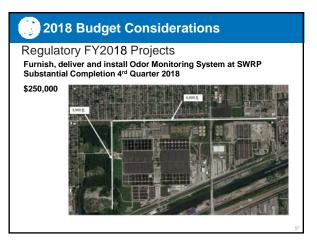


Design Furnish, Deliver, and Install Junction Chamber Odor Control System, CWRP Furnish, Deliver, and Install Odor Control Systems, KWRP Odor Control Facilities at WASSTRIP, Southwest Coarse Screen and Overhead

Regulatory FY2018 Projects

FD&I Odor Monitoring System, SWRP

Weir, SWRP





# 2018 Budget Considerations Regulatory FY2018 Projects Furnish, Deliver, and Install Junction Chamber Odor Control System, CWRP Substantial Completion 4rd Quarter 2019 \$1,000,000

3



### Rehabilitation FY2018 Projects

- Construction 39th Street Conduit Rehabilitation Phase II, SSA Northside Sludge Pipeline Replacement Section 1, NSA
- Replacement of Tailrace Stop Logs, Equipment, and Head Gates, LPH Summit Conduit Rehabilitation, SSA Switchgear & Motor Control Center Replacement, OWRP
- Upper Des Plaines Intercepting Sewer 11D, Ext. C Rehabilitation, NSA Re-Pipe Devon Ave Instream Aeration Station Air Main, OWRP



#### 2018 Budget Considerations J.

Rehabilitation FY2018 Projects Northside Sludge Pipeline replacement - Section 1, NSA -Substantial Completion 4th Quarter 2020

\$14,177,000



# 2018 Budget Considerations

Rehabilitation FY2018 Projects Replacement of Tailrace Stop Logs, Equipment, and Head Gates, LPH - Substantial Completion 2<sup>nd</sup> Quarter 2020 \$10,000,000



#### 2018 Budget Considerations 1

Rehabilitation FY2018 Projects

Summit Conduit Rehabilitation, SSA - Substantial Completion 3rd Quarter 2018

\$1,700,000



# 2018 Budget Considerations

Rehabilitation FY2018 Projects Switchgear & Motor Control Center Replacement, OWRP -Substantial Completion 1st Quarter 2020 \$2,000,000





Rehabilitation FY2018 Projects Upper Des Plaines Intercepting Sewer 11D, Ext. C. Rehabilitation, NSA - Substantial Completion 2<sup>nd</sup> Quarter 2019 \$5,500,000





# 2018 Budget Considerations

#### Value Add FY2018 Projects

Resource Recovery Construction Digester Gas Utilization Facilities, CWRP Organic Waste Receiving Station, Stickney WRP

# 2018 Budget Considerations

Value Add FY2018 Projects Digester Gas Utilization Facilities, CWRP- Substantial Completion 2<sup>nd</sup> Quarter 2020 \$34,000,000



#### 2018 Budget Considerations 3

Value Add FY2018 Projects Organic Waste Receiving Station, Stickney WRP - Substantial Completion 3rd Quarter 2019 \$10,000,000



# 2018 Budget Considerations

Stormwater Bond Fund FY2018 Projects

Construction Addison Creek Channel Improvements Flood Control Project for Deer Creek Flood Control Project on Farmers and Prairie Creeks

- Lyons Levee Flood Control Improvements Streambank Stabilization Project on Tinley Creek in Orland Park, IL

