



FY 2027-2031 CIP DISCUSSION DRAFT 1





October 21, 2025

Jody Caldwell, PE, Chief Planning Officer

Dima El-Gamal, PhD, PE, LEED@AP., Capital Improvement Planning Director

#### **AGENDA**



#### • INTRODUCTION

- Key Takeaways
- Goals and Objectives
- ♦ HISTORICAL KPI's UPDATED
- ♦ FY 2027-2031 CIP DISCUSSION DRAFT 1
  - How We Got Here
  - FY 27-31 CIP At A Glance
  - Opportunities and Challenges
  - Water and Wastewater Details
- ♦ FY 2027-2031 CIP PUBLIC DASHBOARD
- RECAP AND NEXT STEPS





# INTRODUCTION







## **KEY TAKEAWAYS - FY 2027-2031 CIP Discussion Draft 1**



- ♦ FY 27-31 Discussion Draft #1 is complete
- Approach unchanged and is consistent with established methodologies
- ♦ Forecasts overall Wastewater Systems needs and Water System needs, excluding any additions on the water side for the recently discussed Comprehensive Transmission Main Renewal Strategy
- Scope and schedule decisions influenced by funding availability, systems needs, constructability, and market conditions
- ♦ In consideration of GLWA's 10-year FP, a Capital Spend Ratio (CSR) is proposed for select years to address:
  - Project's complexities
  - Projections uncertainty
  - Resource limitations (Vendors and GLWA)
- ◆ Comments and questions, if any, are due November 7, 2025.
- ◆ Board members interested in one-on-one discussions and further clarification, please feel free to contact Director El-Gamal at <u>Dima.El-Gamal@glwater.org</u> to schedule individual meetings.



#### FY 2027-2031 CIP PLAN GOALS AND OBJECTIVES



- Prioritize projects to:
  - Enhance redundancy and resiliency of GLWA's systems
  - Prepare for unforeseen challenges
  - Address health and safety, safeguarding both our teams and partner communities
- Support a coherent and forward-looking approach
- Strategic consideration of:
  - Long-term Master Plans
  - GLWA's 10-year Financial Plan
- Engage stakeholders (share information and solicit input)
- Meet regulatory requirements and operational needs





# HISTORICAL CIP KPI's - UPDATED







## **WATER CIP SPEND - HISTORY**

FY 17

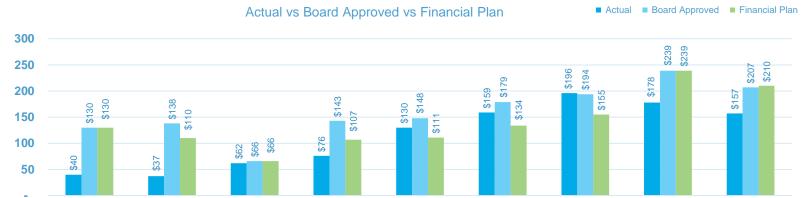
FY 18

FY 19

FY 20



#### WATER



FY 21

FY 22

FY 23

FY 24

FY 25

	Fiscal Year	A Board Approved	B Capital Spend Ratio %	C Financial Plan A x B	D Actual	E % Board Approved <mark>D/A</mark>	F % Financial Plan <mark>D/C</mark>
ER	FY 17	\$ 130M	100%	\$ 130M	\$ 40M	31%	31%
≥	FY 18	\$ 138M	80%	\$ 110M	\$ 37M	27%	34%
	FY 19	\$ 66M	100%	\$ 66M	\$ 62M	94%	94%
	FY 20	\$ 143M	75%	\$ 107M	\$ 76M	53%	71%
2	FY 21	\$ 148M	75%	\$ 111M	\$ 130M	88%	117%
П	FY 22	\$ 179M	75%	\$ 134M	\$ 159M	89%	118%
<b>X</b>	FY 23	\$ 194M	80%	\$ 155M	\$ 196M	101%	126%
<b>~</b>	FY 24	\$ 239M	100%	\$ 239M	\$ 178M	74%	74%
	FY 25	\$ 207M	100%	\$ 210M	\$ 157M	76%	75%



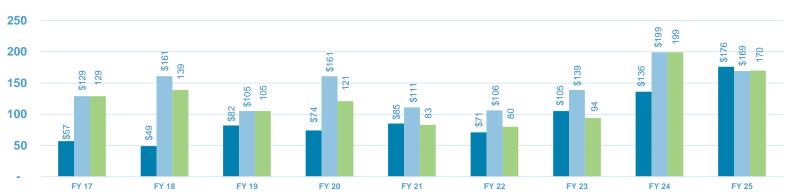
Values in Million Dollars

### **WASTEWATER CIP SPEND - HISTORY**



#### **WASTEWATER**





'ERY	Fiscal Year	A Board Approved	B CSR %	C Financial Plan A x B	D Actual	E % Board Approved <mark>D/A</mark>	F % Financial Plan D/C
	FY 17	\$ 129M	100%	\$ 129M	\$ 57M	44%	44%
DE	FY 18	\$ 161M	87%	\$ 139M	\$ 71M	44%	51%
<u>d</u>	FY 19	\$ 105M	100%	\$ 105M	\$ 82 M	78%	78%
R C	FY 20	\$ 161M	75%	\$ 121M	\$ 74M	46%	61%
E	FY 21	\$ 111M	75%	\$ 83M	\$ 82M	74%	98%
W	FY 22	\$ 106M	75%	\$ 80M	\$ 67M	63%	84%
H	FY 23	\$ 126M	75%	\$ 94M	\$ 105M	83%	112%
/AS	FY 24	\$ 199M	100%	\$ 199M	\$ 136M	68%	68%
>	FY 25	\$ 169M	100%	\$ 170M	\$ 176M	104%	104%



Values in Million Dollars

# FY 2027-2031 DISCUSSION DRAFT 1







## FY 2027-2031 ROAD MAP- HOW WE GOT HERE







FY 27-31 CIP Kick-Off Portal Meeting Open

Portal/ Training April 15 & **PM Project** & Scoring Updates

Project Scores Last day Evaluation to score May 09 projects May 09 May 23

**SCORING** 

June

A CONTRACTOR

CIP Work Alignment Alignment Group Meetings Dashboard Meeting W - July 14 & 21 September October WW - July 24

CPC Legistar Meeting

**DRAFT 1** 

August/September/

October

CPC Meeting October

Draft 1

Charges Rollout November 13

Draft 2 Legistar Workgroup Meeting upload December December December

Draft 2 Meeting

**Board** Presentation January 28, 2026

**Board** Presentation February









**PROJECT** 

**UPDATES** 

May







ALIGNMENT

July









DRAFT 2

November/December







**FY 27-31 CIP** 

FY 27-31 CIP

**PRE-ALIGNMENT PROJECTVALIDATION April** 



Board Approved CIP 27-31 February



Financial Budget Prediction **Analysis** April 01



Pre-Alignment W - April 16, 22 WW - April 16, 22 &



CPR Meeting: Report on Pre-Alignment May 01



Last day to to CIP FY 27-31



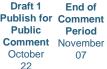
Scoring Review projects Committee Meetings May 30 June 09 & 23 June 12 & 24



CPC Meeting July 18









October Draft 2 Actuals November November 26 18



Draft 2



**Published Presentation** 

CPC

February

10. 2026



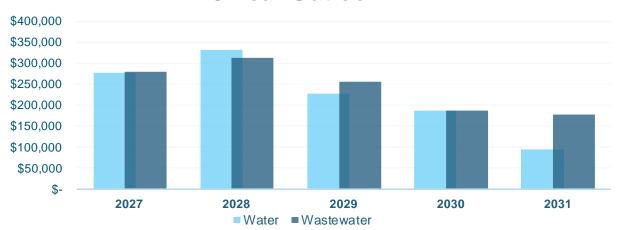
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## **CIP AT A GLANCE**



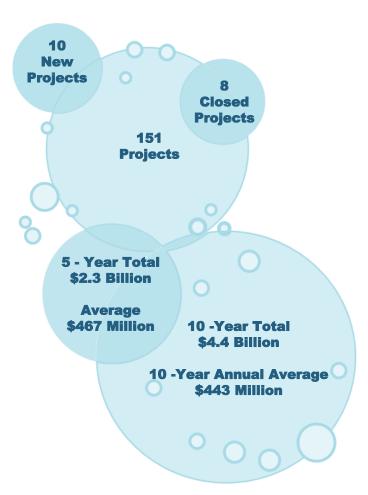
#### **5-Year Outlook**



WA	ΓER
5-Year Total	\$1,119,593
5-Year Average	\$223,919
10-Year Total	\$2,267,212
10-Year Average	\$226,721

WASTE	WATER
5-Year Total	\$1,216,736
5-Year Average	\$243,347
10-Year Total	\$2,158,831
10-Year Average	\$215,883





#### **DISCUSSION DRAFT 1 - KEY HIGHLIGHTS**



- **♦** Actuals and Forecasts:
  - Actuals as of July 31, 2025
  - Project Manager updates as of September 2, 2025
- **♦ A CSR is Proposed for the CIP 5 year and 10-year Projections** 
  - Project complexities
  - Projection uncertainty
- ◆ Financial Chapter: Included in Discussion Draft 1
- **♦** Central Services category removed to facilitate efficient transition to PMIS\*\*
- ◆ Public CIP Dashboard accessible on GLWA Website

<sup>\*\*</sup> Projects will be addressed under Water and Water categories

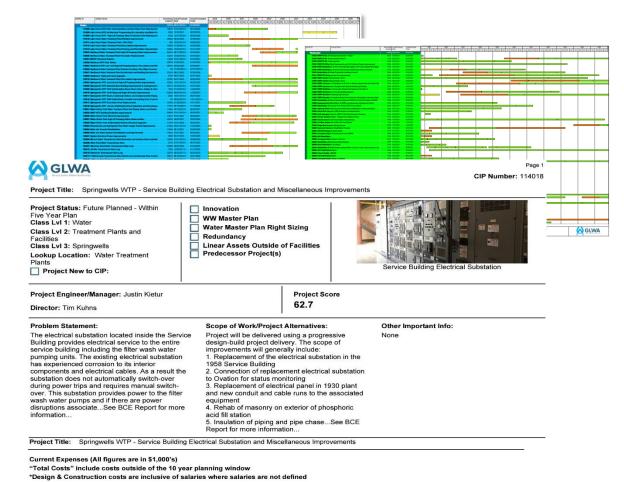


<sup>\*</sup> The plan is for Discussion Draft 2 to be updated to include updated actuals reporting

## FY 2027-2031 CIP DOCUMENT HIGHLIGHTS



- CIP at a glance
- Project summaries
- Water and Wastewater BCEs
- Summary tables per various categories
- GIS Maps
- Integrated master schedule
- ♦ Link to CIP Document page CIP GLWA





Design/Engineering

\$2 163

\$2 163

### FY 2027-2031 CIP OPPORTUNITIES



#### WATER

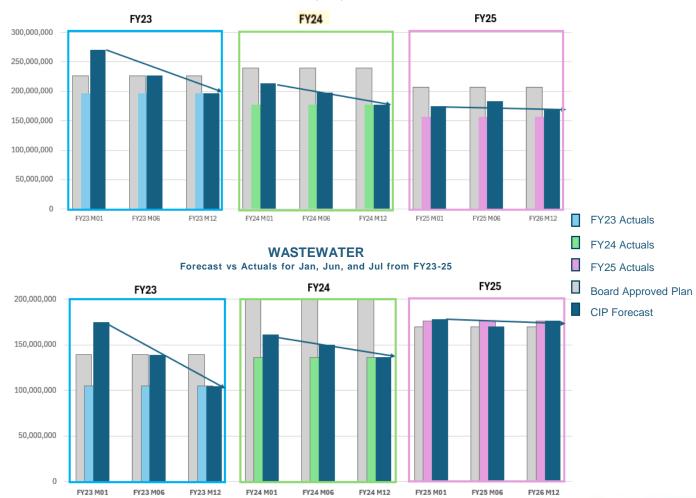
Forecast vs Actuals for Jan, Jun, and Jul from FY23-25



- Active portfolio monitoring
- Improved portfolio management

#### **♦** Frequent Updates

- Improved Schedules
- Improved Forecasts
- **♦** Funding availability





#### FY 2027-2031 CIP CHALLENGES



- Balancing the systems needs with prudent financial planning
- Mitigating the impacts of potential project complexities
- Resource limitations (Vendors and GLWA)





#### FY 2027-2036 CIP WATER SUMMARY



HIGH LEVEL SUMMARY OF CIP

PROJECTS WITH SIGNIFICANT SCHEDULE ADJUSTMENTS

WATER SYSTEM STATISTICS

**NEW PROJECTS** 



## FY 2027-2031 CIP WATER SUMMARY



CIP Document	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	5-Year Total
Approved Water CIP FY 2026-2030	\$183,064	\$233,120	\$285,942	\$230,461	\$150,642	\$160,957	\$1,083,229
Draft 1 Water CIP FY 2027-2031		\$277,274	\$333,737	\$227,589	\$186,974	\$94,019	\$1,119,593
Difference		\$44,154	\$47,796	\$(2,873)	\$36,333	\$(66,939)	\$36,364
Difference %		18.94%	16.72%	-1.25%	24.12%	-41.59%	3.36%

	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	5-Year Avg
Proposed CSR %	100%	95%	90%	100%	100%	100%	97%

Financial Plan	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	5-Year Total
Approved Water CIP FY 2026-2030	\$183,064	\$233,120	\$285,942	\$230,461	\$150,642	\$160 <mark>,</mark> 957	\$1,083,229
Draft 1 Water CIP FY 2027-2031 with CSR		\$263,410	\$300,363	\$227,589	\$186,974	\$94,019	\$1,072,355

- 5-year total for FY 27-31 is ~3.36% more than FY 26-30 CIP
- 5-year annual average is \$223,919 for FY 27-31 vs \$216,646 from FY 26-30 (*Prior to applying CSR*)



# FY 2027-2031 CIP WATER PROJECTS WITH SCHEDULE SHIFT => 2 YRS.



#### Four (4) Water projects with a schedule start change of two (2) years or more

CIP	TITLE	REASON	VARIANCE (IN YEARS)
170500	Transmission System Valve Rehabilitation and Replacement Program	Un-Allocated Program Funds shifted	7
122019	Hattarean Main Paniacamant Project	Delayed due to project interdependency on outside organizational project delays	4
170400	Water Transmission Improvement Program	Un-Allocated Program Funds shifted	4
171500	Roof Replacement at Water Works Park, Springwells, Lake Huron, Northeast, Southwest, North Service Center, Orion, Franklin, and Conner Creek Facilities	Un-Allocated Program Funds shifted	3

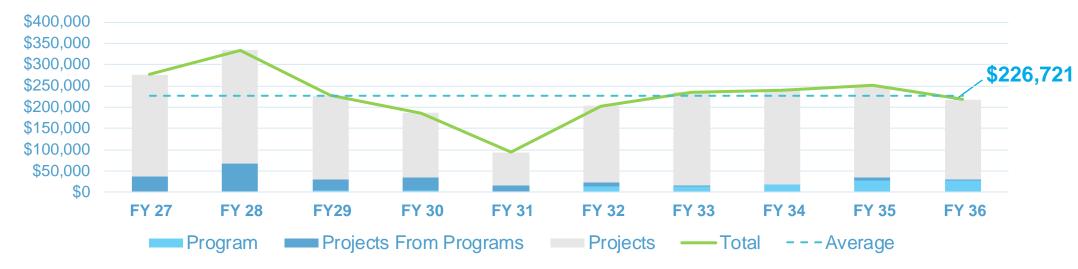


## FY 2027-2036 CIP 10-YEAR WATER OUTLOOK



Program Category	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	FY 35	FY 36
Program	\$0	\$518	\$1,018	\$3,547	\$3,547	\$1,589	\$13,478	\$13,807	\$17,541	\$28,436	\$26,825
Projects	\$124,840	\$239,660	\$266,753	\$197,149	\$152,288	\$78,152	\$179,670	\$221,352	\$221,707	\$216,108	\$187,141
Projects From Programs	\$69,465	\$37,097	\$65,966	\$26,894	\$31,140	\$14,278	\$9,594	\$1,152	\$479	\$6,603	\$3,727
Total	\$194,305	\$277,274	\$333,737	\$227,589	\$186,974	\$94,019	\$202,743	\$236,311	\$239,726	\$251,147	\$217,693

#### **10-Year Water CIP Outlook**



#### ~2.3% <u>increase</u> in 10-year average from FY26-30 CIP (\$221,692)

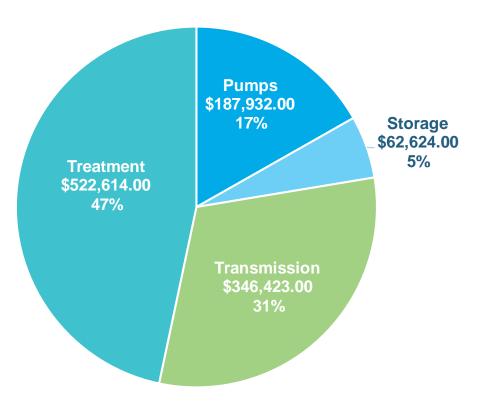


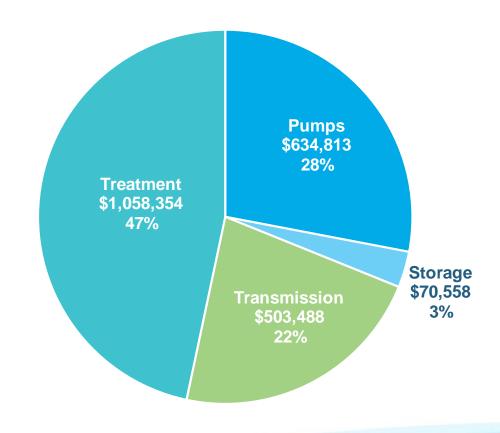
# FY 2027-2031 CIP WATER SYSTEM STATISTICS PROJECTS BY TYPE



WATER 5-YEAR FY27-31

#### WATER 10-YEAR FY27-36



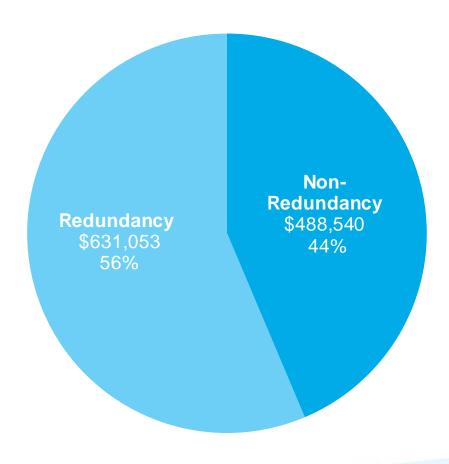








#### **5-YEAR**





# FY 2027-2031 CIP WATER SYSTEM STATISTICS MASTER PLAN PROJECTS



CIP#	Title Title	2027-2031 CIP Total
111001	Lake Huron WTP, Low-Lift, High Lift and Filter Backwash Pumping System Improvements	\$97,474
111010	Lake Huron WTP Filtration Improvement	\$3,619
112003	Northeast Water Treatment Plant High-Lift Pumping Station Improvements	\$0
113003	Southwest Water Treatment Plant Low- and High lift Pumping station Improvements	\$0
113010	Southwest Water Treatment Plant Flocculation Improvements	\$29,677
114002	Springwells Water Treatment Plant, Low-Lift and High-Lift Pumping Station Improvements	\$64,783
115001	Water Works Park Water Treatment Plant Yard Piping, Valves and Venturi Meters Replacement	\$0
115007	Water Works Park High Lift Pumping Station Modernization	\$0
122007	Merriman Road Water Transmission Main Loop	\$6,564
132019	Wick Road Pumping Station Improvements	\$0
132021	Imlay Pumping Station Improvements	\$0
170907	GLWA New Water Master Meter FL-01 Vault Upgrade and Rightsizing	\$0

Financial figures in \$1,000s and rounded

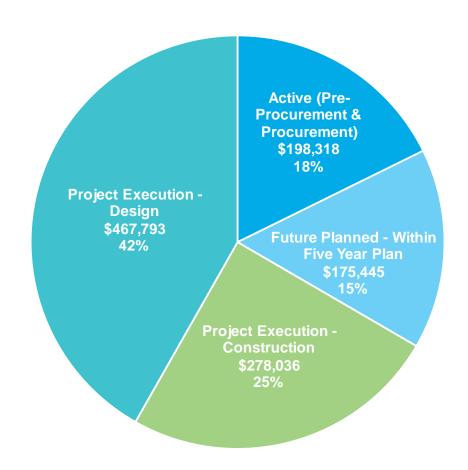


	FY 27-31
Water Non-Master Plan	\$917,476
Water Master Plan	<b>\$202,117</b> <i>(18%)</i>
Total	\$1,119,593

CIP – Capital Improvement Plan | FY – Fiscal Year
WTP – Water Treatment Plant

# FY 2027-2031 CIP WATER SYSTEM STATISTICS PROJECTS STATUS 5-YEAR







## FY 2027-2031 CIP NEW WATER PROJECTS



#### 9 new project and 1 new program were added to the FY 27-31 CIP

CIP Number	Title	Total Project \$	Design Start	Construction Start	Construction End	Project Score
170605	42-inch Squirrel, Auburn Hills – Condition Assessment	\$5,618	9/1/2029	10/1/2030	4/30/2031	58.4
170606	120-inch Pipeline Renewals	\$30,825	7/1/2025	10/1/2027	4/30/2028	77.5
170607	42-inch Tyler-North, Van Buren Township – Condition Assessment	\$6,629	7/1/2026	8/3/2028	5/31/2030	57.5
170507	Water Transmission, Valve, Emergency and Other Urgent Repairs – Contract 2	\$15,150	N/A	10/1/2026	10/1/2031	100.0
170700*	Transmission Pump Station Mechanical/Structural/Architectural Improvements Program	\$10,000	07/01/2030	07/01/2030	06/30/2040	n/a
114019	Springwell Sedimentation Basins Sludge Processing Facility	\$8,080	N/A	07/01/2026	01/01/2028	74.4
116101	Design/Inspection of Raw Water Tunnels	\$4,242	N/A	09/15/2026	04/15/2028	59.4
112009	Northeast Sedimentation Basins Sludge Processing Facility	\$9,090	07/01/2025	07/01/2026	01/01/2028	74.4
122024	Central Post Beard Transmission Main Renewal	\$25,250	N/A	01/01/2027	01/01/2028	75.0
122025**	Morang Transmission Main Replacement	\$9,090	07/01/2031	07/01/2031	07/01/2032	63.9

<sup>\*</sup> New Program

<sup>\*\*</sup> Starts Within - 10-year outlook



## BEARD TRANSMISSION MAIN RENEWAL



CIP

**PROJECT LOCATION** 

PROJECT MANAGER

122024

**Detroit** 

**Corey Brecht** 

PROJECT DRIVERS

Health and safety & public benefit

# **Project Background**

54-inch transmission main along Beard was location of major break in February 2025. The pipeline segment has issues with longitudinal weld and is almost 100 years old.

#### Scope

Options assessed:

- "Do nothing" alternative considered non-viable considering the consequence of failure of this pipeline.
- Replacement costs evaluated, but open cut construction of this pipeline in a heavily urbanized area was not considered viable.
- Rehab alternative via slip lining was selected as the pipeline diameter can be reduced without impact to the system hydraulics.

# Springwells St Stair St Springwells St Springwells St

#### **Project Drivers**

Central Post Beard Transmission Main failed catastrophically in February 2025. It was discovered that the failure within the 54-inch steel pipe occurred along a longitudinal weld. There is currently limited technology available for reliable condition assessment of this pipeline, so GLWA is looking to perform pipeline renewal through a slip-lining method.



## FY 2027-2036 WASTEWATER SUMMARY



HIGH LEVEL SUMMARY OF CIP

PROJECTS WITH SIGNIFICANT SCHEDULE ADJUSTMENTS

WASTEWATER STATISTICS

**NEW PROJECTS** 



## FY 2027-2031 CIP WASTEWATER SUMMARY



CIP Document	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	5-Year Total
Approved Wastewater CIP FY 2026-2030	\$193,221	\$291,841	\$337,800	\$261,115	\$187,625	\$155,511	\$1,271,603
Draft 1 Wastewater CIP FY 2027-2031		\$280,901	\$312,648	\$257,620	\$188,294	\$177,273	\$1,216,736
Difference		(\$10,940)	(\$25,151)	\$(3,496)	\$668	\$21,762	\$(54,868)
Difference %		-3.75%	-7.45%	-1.34%	0.36%	13.99%	-4.31%

	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	5-Year Avg
Proposed CSR %	90%	90%	89%	91%	97%	100%	90%

Financial Plan	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	5-Year Total
Approved Wastewater CIP FY 2026-2030	\$173,899	\$233,473	\$283,752	\$250,671	\$187,625	\$155,511	\$1,129,420
Draft 1 Wastewater CIP FY 2027-2031 with CSR		\$252,811	\$278,257	\$234,434	\$182,645	\$177,273	\$1,125,419

- 4.31 % decrease in the 5-year total between FY 26-30 & Proposed FY 27-31 CIP
- 5-year annual average is \$243,347 (compared to \$254,320 from FY 26-30)



## FY 2027-2031 CIP WASTEWATER PROJECTS



#### W/ SCHEDULE SHIFT => 2 YRS

#### Two (2) wastewater projects with a schedule start change of 2 years or more

CIP	TITLE	REASON	VARIANCE IN YEARS
260900	WRRF Facility Optimization Program	Un-Allocated Program funds shifted	9
260200	Sewer and Interceptor Rehabilitation Program	Un-Allocated Program funds shifted	5



# FY 2027-2036 CIP 10-YEAR WASTEWATER OUTLOOK



Program Category	FY 26	FY 27	FY 28	FY 29	FY 30	FY 31	FY 32	FY 33	FY 34	FY 35	FY 36
Program	\$0	\$115	\$2,168	\$2,162	\$15	\$515	\$14,589	\$18,214	\$25,990	\$42,753	\$42,172
Projects	\$208,911	\$244,175	\$269,924	\$234,194	\$187,572	\$176,758	\$122,843	\$94,136	\$133,902	\$210,478	\$237,018
Projects From Programs	\$61,424	\$36,611	\$40,557	\$21,264	\$707	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$270,335	\$280,901	\$312,648	\$257,620	\$188,294	\$177,273	\$137,433	\$112,349	\$159,892	\$253,231	\$279,190



• ~2% <u>decrease</u> in 10-year average from FY 26-30 CIP (\$211,283)

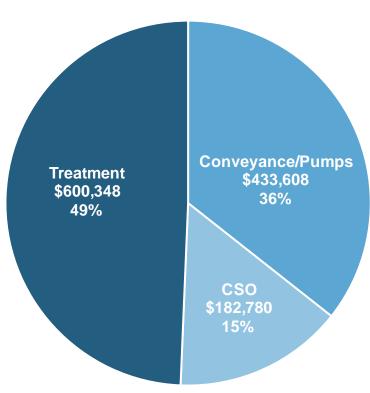


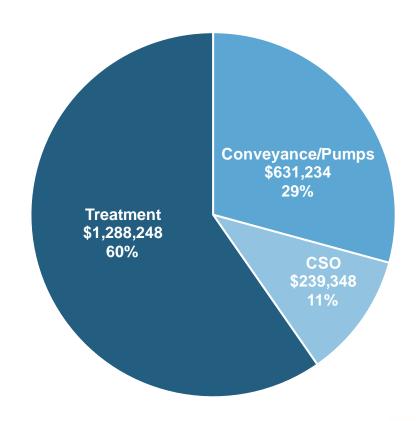
# FY 2027-2031 CIP WASTEWATER SYSTEM STATISTICS PROJECTS BY TYPE



**WASTEWATER FY27-31** 

#### **WASTEWATER FY27-36**



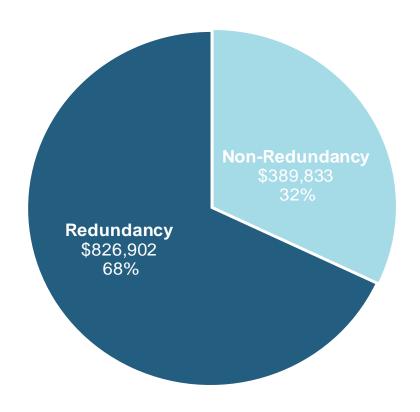








5-YEAR

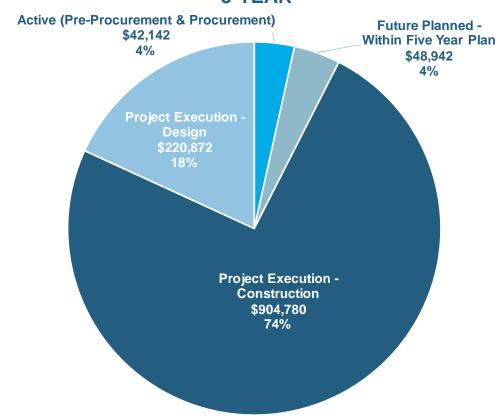














# FY 2027-2031 CIP WASTEWATER NEW PROJECTS



#### No new wastewater projects were added to the FY 27-31 CIP

CIP	#	Title	Total Project \$	Design Start	Const. Start	Const. End	Project Score



# FY 2027-2031 CIP WATER AND WASETWATER PROJECTS WITH STATUS CHANGE

**CLOSED** 

PENDING CLOSEOUT

RECLASSIFIED/CANCELED

**SPLIT** 



# FY 2027-2031 CIP WATER AND WASTEWATER PROJECT STATUS CHANGES



#### **CLOSED**

CIP Area	CIP#	Title	Total
	114011	Springwells WTP Steam, Condensate Return, and Compressed Air Piping Improvements	\$26,990
	116005	Belle Isle Seawall Rehabilitation	\$2,078
Motor	122013	14 Mile Transmission Main Loop	\$113,832
Water	122017	7 Mile/Nevada Transmission Main Rehab	\$13,122
	170503	Transmission Mains Valves and Urgent Repairs Contract 2	\$16,169
	170801	Reservoir Inspection, Design & Construction Project at Imlay Station, Lake Huron WTP, Springwells WTP, Southwest WTP	\$25,210
Water Total			\$197,401
Mactawater	260508	B-39 Outfall Rehabilitation	\$10,461
Wastewater	260901	Rehabilitation of HAZMAT Facility at WRRF	\$3,792
Wastewater Total			\$14,253

#### **RECLASSIFIED & CANCELLED**

CIP Area	CIP#	Title	Project Status	
Motor	111008*	Lake Huron WTP, Architectural Programming for Laboratory and Admin Building Improvements	Canceled	
Water	116007	System Electrical Power Improvements	Cariceled	
Controlized Services**	381000*	Power Quality: Electric Metering Improvement Program	Canceled	
Centralized Services**	383300*	Masonry Replacement and Rehabilitation Program	Canceled	

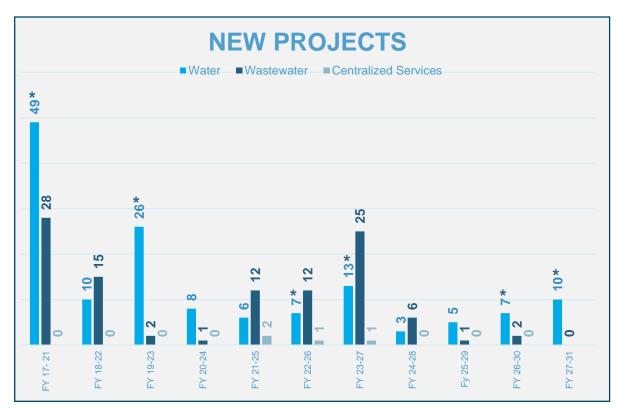
#### \* Related improvements will be incorporated as part of projects within each facility PENDING CLOSEOUT

CIP Area	CIP#	Title	Total
Water	170302	Southwest SCADA System Upgrade	\$8,162
Water Total			\$8,162
	260201	CON-149, Emergency Sewer Repair	\$39,032
Wastewater	260205	Northwest Interceptor Rehabilitation	\$9,114
	270003	Long Term CSO Control Plan	\$8,173
Wastewater Total			\$55,154



## HISTORICAL REVIEW - NEW & CLOSED CIP PROJECTS







#### TOTAL NEW

- ♦ Water 144
- Wastewater 104
- Centralized 4

\* includes projects from programs

#### **♦ TOTAL CLOSED**

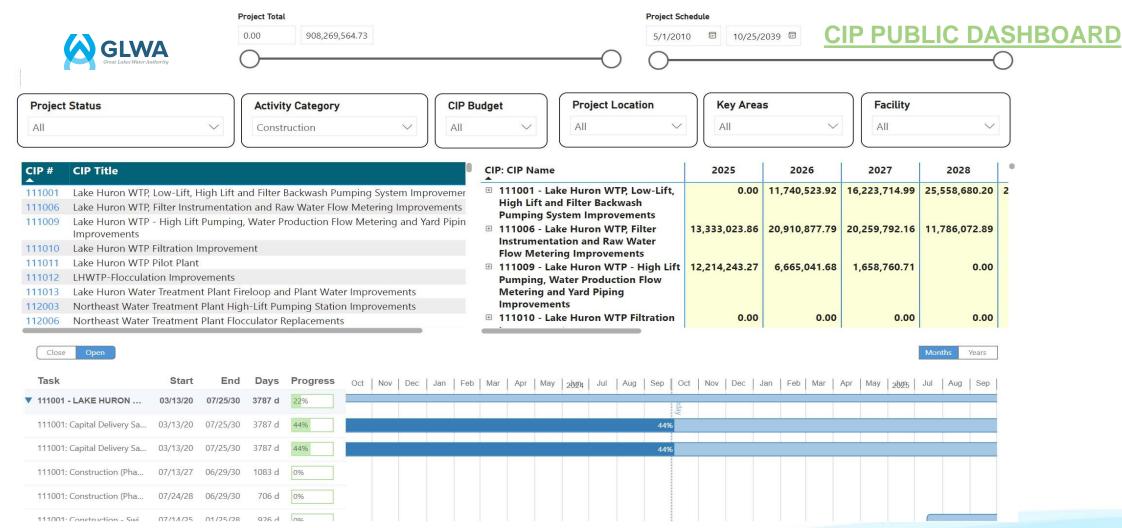
- Water 62
- Wastewater 39
- ♦ Centralized 10





#### **PUBLIC DASHBOARD**







# RECAP & NEXT STEPS



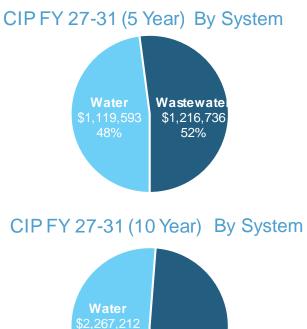




# WATER & WASTEWATER FY 2027-2036 CIP (10YR PROJECTIONS)







Financial figures in \$1,000s and rounded



Wastewater \$2,158,831 49%

# **KEY TAKEAWAYS - FY 2027-2031 CIP Discussion Draft 1**

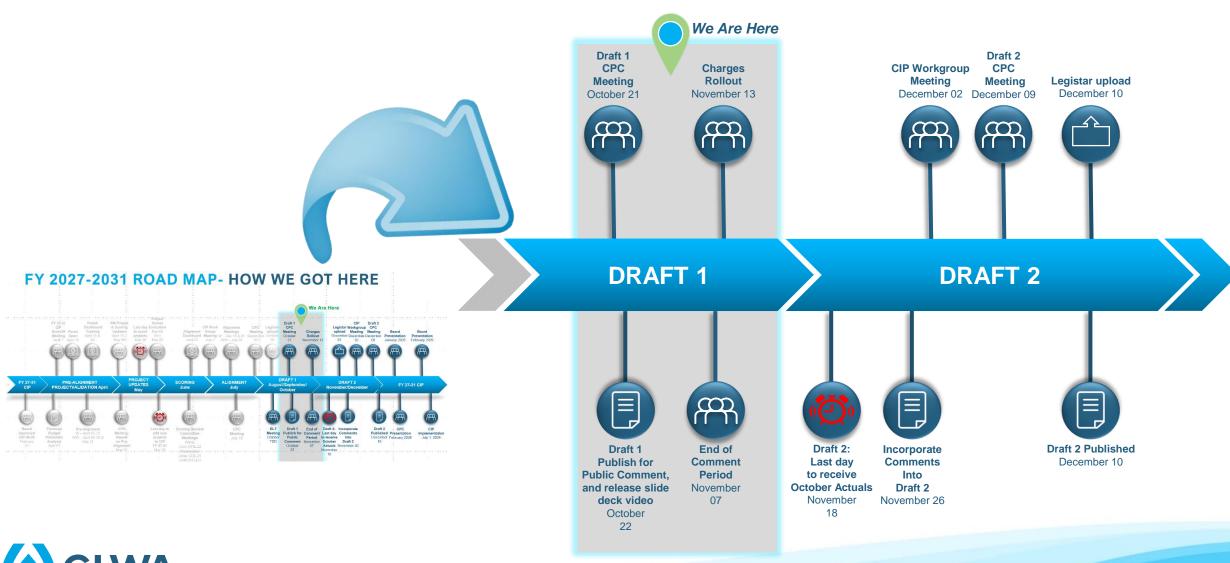


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## FY 2027-2031 CIP ROADMAP - WHAT'S NEXT







# THANK YOU





