



CIP Delivery Team

GLWA FY 2026 - 2030 CAPITAL IMPROVEMENT PLAN

GLWA Board of Directors Meeting January 22, 2025

Jody Caldwell, PE
Chief Planning Officer

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



Freud Pump Station Improvements
Photo Submitted by Paul Ransom of Wastewater Operating Services



**PROPOSED
CAPITAL IMPROVEMENT PLAN
FY 2026-2030**



Updated January 10, 2025



Northeast Water Treatment Plant Filter Replacement
Photo Submitted by Erich Klun of Water Operating Services

AGENDA



CIP Delivery Team

💧 KEY TAKEAWAYS

💧 FY 2026 - 2030 CIP ROADMAP

💧 FY 2026 - 2030 CIP HIGHLIGHTS

- 💧 CIP AT A Glance
- 💧 Capital Spend Ratio-Financial Plan
- 💧 Water and Wastewater Summaries

💧 CIP Public Dashboard

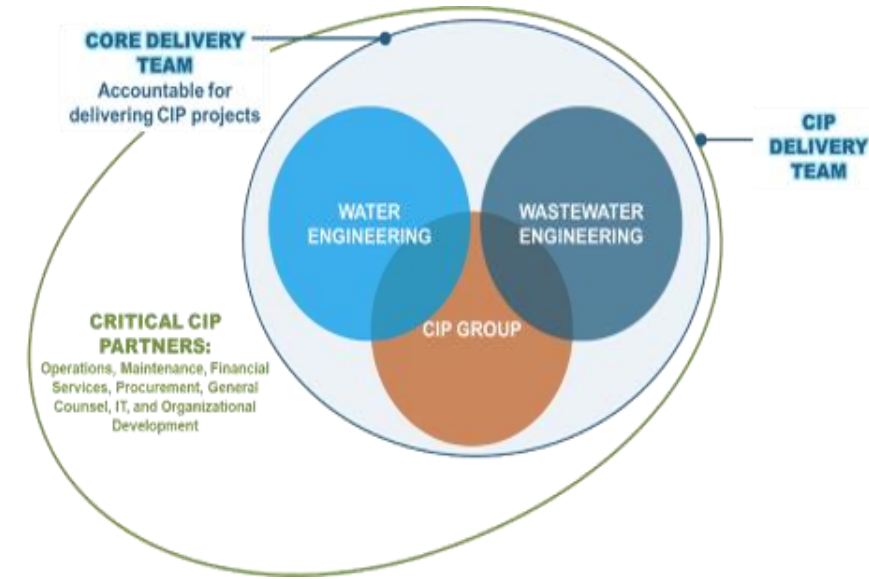
💧 RECAP AND QUESTIONS

AGENDA



KEY TAKEAWAYS

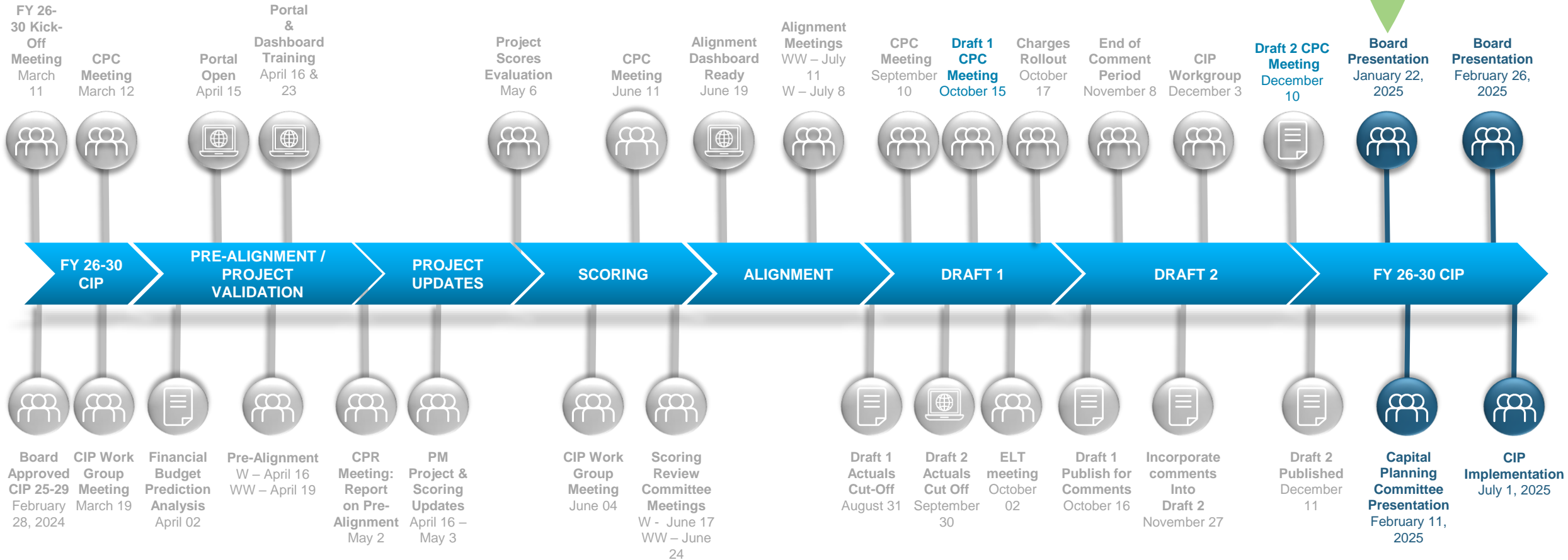
- ◆ Five-year document with a 10-year outlook
- ◆ Opportunities for Stakeholders to provide input during development
- ◆ Presented to Capital Planning Committee on Dec 10, 2024
- ◆ Needed projects from all areas of the organization to promote redundancy, resiliency, public health and safety
- ◆ Conformance with recommendations from planning documents and meets regulatory and operational needs
- ◆ FY 2026-2030 CIP is in alignment with the GLWA's 10-Year Financial Plan
 - ◆ Reflects forecasts of the System's overall needs
 - ◆ A Capital Spend Ratio (CSR) is proposed to mitigate the impacts of potential project complexities and resource limitations (Vendors and GLWA)



FY 2026-2030 ROADMAP- HOW WE GOT HERE



We Are Here



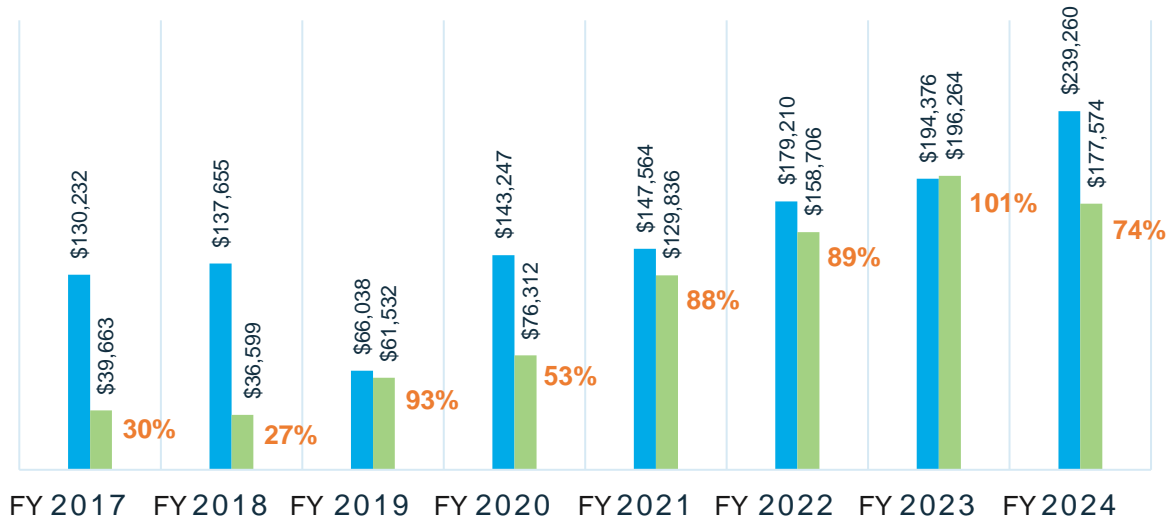
CPC – Capital Planning Committee | CIP – Capital Improvement Plan
 CPR – Capital Program Review | ELT – Executive Leadership Team | PM – Project Manager

CIP DELIVERY: PAST PERFORMANCE HIGHLIGHTS



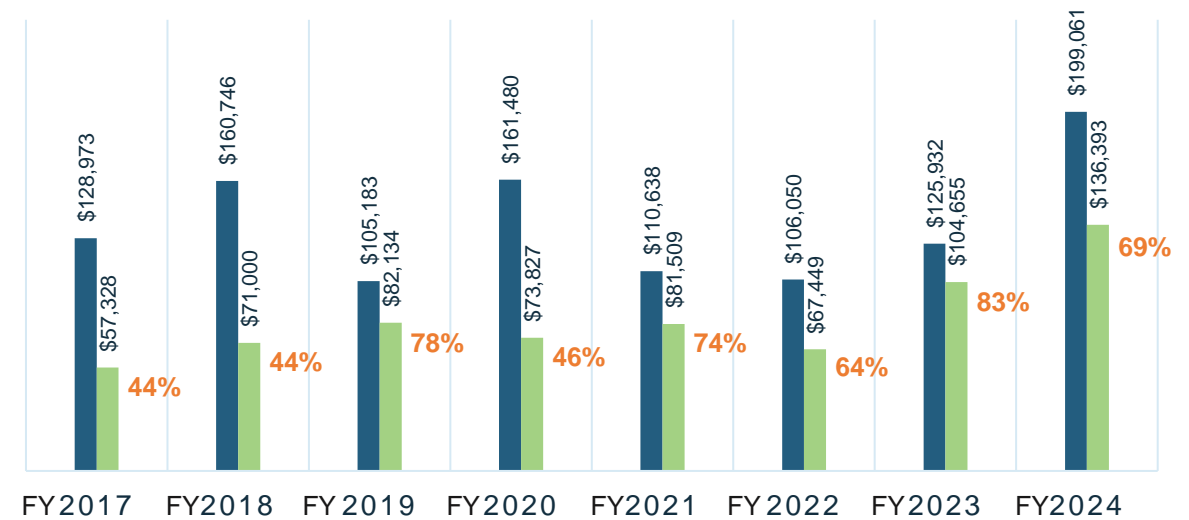
WATER

■ Approved Plan ■ Actual Spend



WASTEWATER

■ Approved Plan ■ Actual Spend



(Figures are shown in \$1,000's)



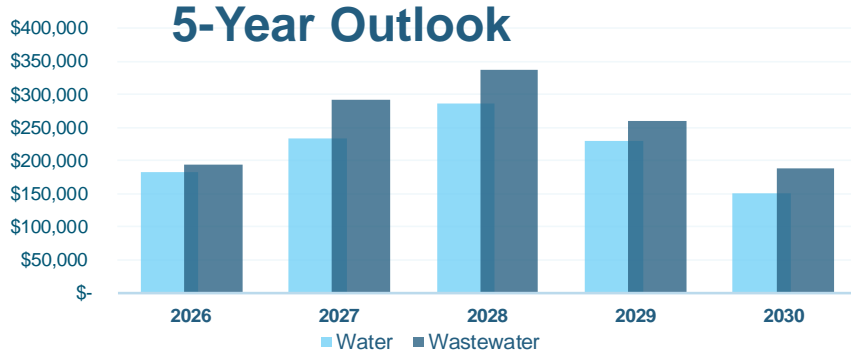
FY 2026-2030 CIP HIGHLIGHTS



CIP Delivery Team



FY 2026 - 2030 DISCUSSION DRAFT 2 - CIP AT A GLANCE

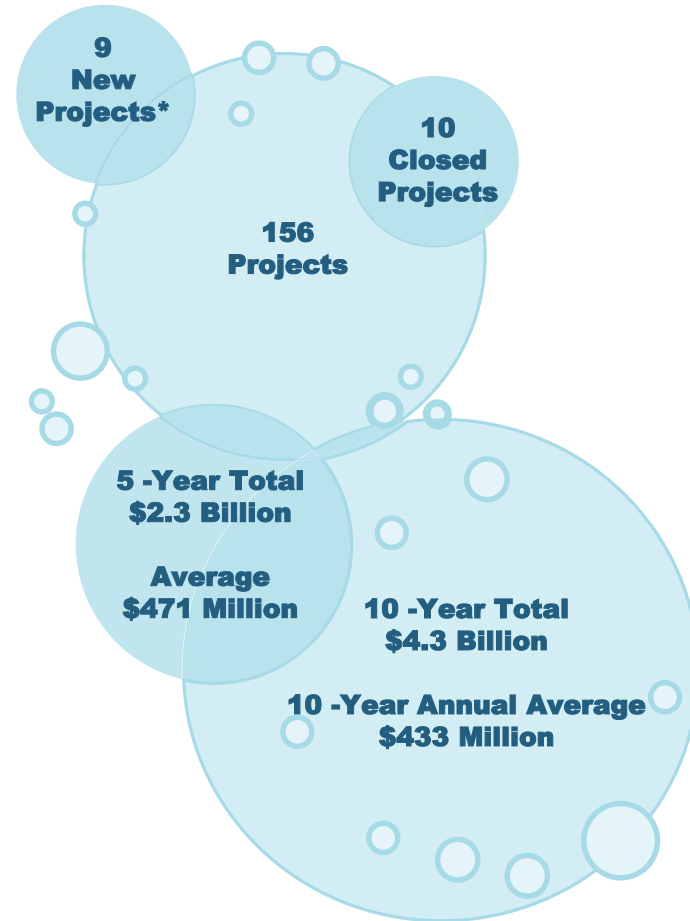


Financial figures in \$1,000s and rounded

| WATER | |
|-----------------|-------------|
| 5-Year Total | \$1,083,229 |
| 5-Year Average | \$216,646 |
| 10-Year Total | \$2,216,920 |
| 10-Year Average | \$221,692 |

| WASTEWATER | |
|-----------------|-------------|
| 5-Year Total | \$1,271,603 |
| 5-Year Average | \$254,321 |
| 10-Year Total | \$2,112,834 |
| 10-Year Average | \$211,283 |

* Based on Oct 31, 2024, actuals and PM cost and schedule updates as of Nov 15, 2024



***5 NEW PROJECTS FROM PROGRAMS**

CAPITAL SPEND RATIO – FINANCIAL PLAN

- GLWA Board Policy adopted November 28, 2018, “Capital Program Spend Rate Assumption Policy”
 - Annually, a projected spend rate assumption for the financial plan related to the proposed capital improvement plan will be established based upon pertinent factors and data available at that time. Such pertinent factors and data will include the mix of projects and phases in the proposed CIP, interdependency risk, criticality, and other measures provided by the GLWA team members that develop and manage the CIP projects. That spend rate assumption will be presented to the Audit Committee no later than December 31st each year after the GLWA Board, Capital Improvement Planning Committee, and member partners have had the opportunity to review the draft capital improvement plan.
- Spend rate assumptions in the current financial plan (as of January 6, 2025) vary from year to year. Over the course of the ten year plan the lowest is at 80% and the highest is 100%.

| | CSR by Fiscal Year | | | | | | | | | |
|-------------------|--------------------|------|------|------|------|------|------|------|------|------|
| | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| Water | 100% | 100% | 100% | 95% | 95% | 95% | 95% | 100% | 100% | 100% |
| Wastewater | 90% | 80% | 84% | 96% | 100% | 100% | 100% | 100% | 95% | 87% |

- Forecasted CIP expenditures in the ten-year plan are rounded up to the nearest \$5 million to recognize the dynamic nature of the CIP.

| | CIP Financing by Fiscal Year (millions) | | | | | | | | | |
|-------------------|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 |
| Water | \$ 185 | \$ 235 | \$ 290 | \$ 220 | \$ 145 | \$ 155 | \$ 190 | \$ 275 | \$ 265 | \$ 240 |
| Wastewater | \$ 175 | \$ 235 | \$ 285 | \$ 255 | \$ 190 | \$ 160 | \$ 140 | \$ 140 | \$ 165 | \$ 210 |

WATER FY 2026 - 2030 CIP SUMMARY



| CIP Document | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | 5-Year Total |
|------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| Draft #2 Water CIP FY 26-30 | \$179,407 | \$183,064 | \$233,120 | \$285,942 | \$230,461 | \$150,642 | \$1,083,229 |

| | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | 5-Year Avg |
|-----------------------|-------|-------|-------|-------|-------|-------|------------|
| Proposed CSR % | 100% | 100% | 100% | 100% | 95% | 95% | 98% |

| Financial Plan | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | 5-Year Total |
|--|------------|------------|-----------|-----------|-----------|------------|--------------|
| Approved Water CIP FY 2025-2029 | \$207,333 | \$209,752 | \$227,823 | \$236,331 | \$190,550 | \$202,288 | \$1,071,789 |
| Water CIP FY 2026-2030 with CSR | \$179,407 | \$183,064 | \$233,120 | \$285,942 | \$218,938 | \$143,110 | \$1,064,174 |
| Difference with CSR | (\$27,926) | (\$26,688) | \$5,297 | \$49,611 | \$28,388 | (\$59,178) | (\$7,615) |
| Difference with CSR % | -13.47% | -12.72% | 2.33% | 20.99% | 14.90% | -29.25% | -0.71% |

(Figures are shown in \$1,000's)



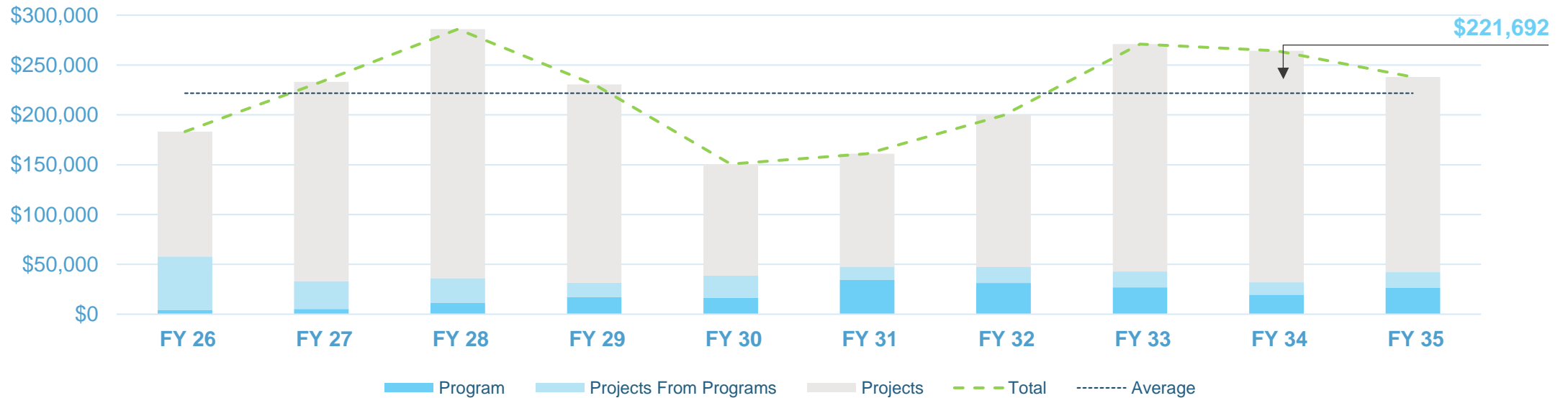
CIP – Capital Improvement Plan | FY – Fiscal Year | CSR – Capital Spend Ratio

WATER FY 2026 - 2035 10-YEAR CIP OUTLOOK



| | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | FY 31 | FY 32 | FY 33 | FY 34 | FY 35 |
|------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Program | \$2,046 | \$4,346 | \$5,308 | \$11,263 | \$17,346 | \$16,677 | \$34,602 | \$31,314 | \$26,883 | \$19,608 | \$26,562 |
| Projects | \$140,297 | \$125,226 | \$199,880 | \$249,803 | \$198,824 | \$111,962 | \$113,280 | \$152,166 | \$228,158 | \$232,163 | \$195,855 |
| Projects From Programs | \$37,064 | \$53,492 | \$27,932 | \$24,876 | \$14,290 | \$22,003 | \$13,075 | \$16,090 | \$15,916 | \$12,425 | \$15,594 |
| Total | \$179,407 | \$183,064 | \$233,120 | \$285,942 | \$230,461 | \$150,642 | \$160,957 | \$199,570 | \$270,957 | \$264,197 | \$238,011 |

10-Year Water CIP Outlook



Financial figures in \$1,000s and rounded

WASTEWATER FY 2026-2030 CIP SUMMARY



| CIP Document | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | 5-Year Total |
|---|-----------|-----------|-----------|-----------|-----------|-----------|--------------|
| Draft #2 Wastewater CIP FY 26-30 | \$163,276 | \$193,221 | \$291,841 | \$337,800 | \$261,115 | \$187,625 | \$1,271,603 |

| | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | 5-Year Avg |
|-----------------------|-------|-------|-------|-------|-------|-------|------------|
| Proposed CSR % | 100% | 90% | 80% | 84% | 96% | 100% | 90% |

| Financial Plan | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | 5-Year Total |
|---|-----------|------------|-----------|-----------|-----------|-----------|--------------|
| Approved Wastewater CIP FY 2025-2029 | \$169,189 | \$212,693 | \$216,231 | \$201,995 | \$182,417 | \$180,433 | \$982,525 |
| Wastewater CIP FY 2026-2030 with CSR | \$163,276 | \$173,899 | \$233,473 | \$283,752 | \$250,671 | \$187,625 | \$1,129,420 |
| Difference with CSR | (\$5,913) | (\$38,794) | \$17,242 | \$81,757 | \$68,254 | \$7,192 | \$146,895 |
| Difference with CSR % | -3.49% | -18.24% | 7.97% | 40.47% | 37.42% | 3.99% | 14.95% |

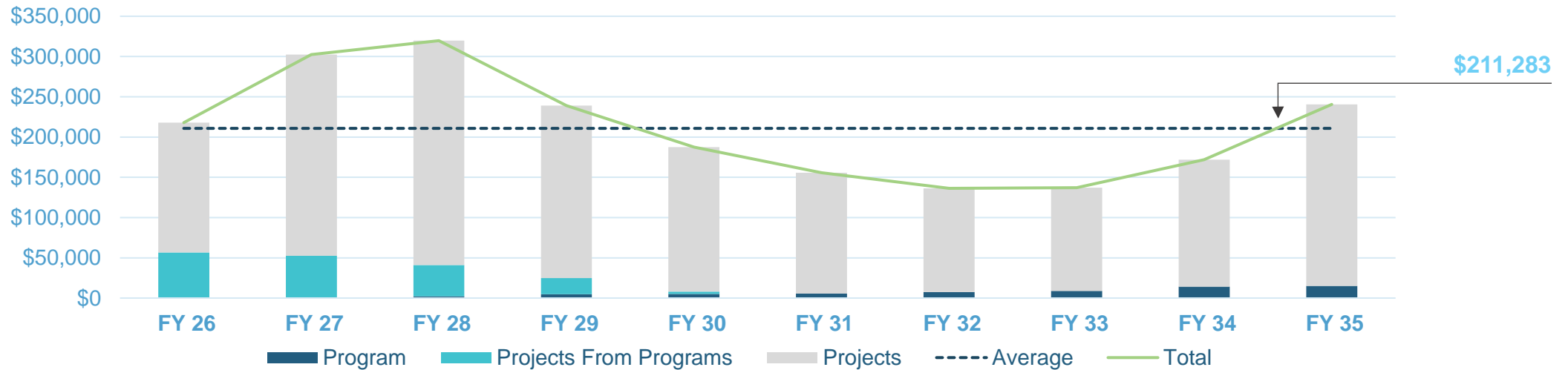
(Figures are shown in \$1,000's)

WASTEWATER FY2026-2035 10-YEAR CIP OUTLOOK



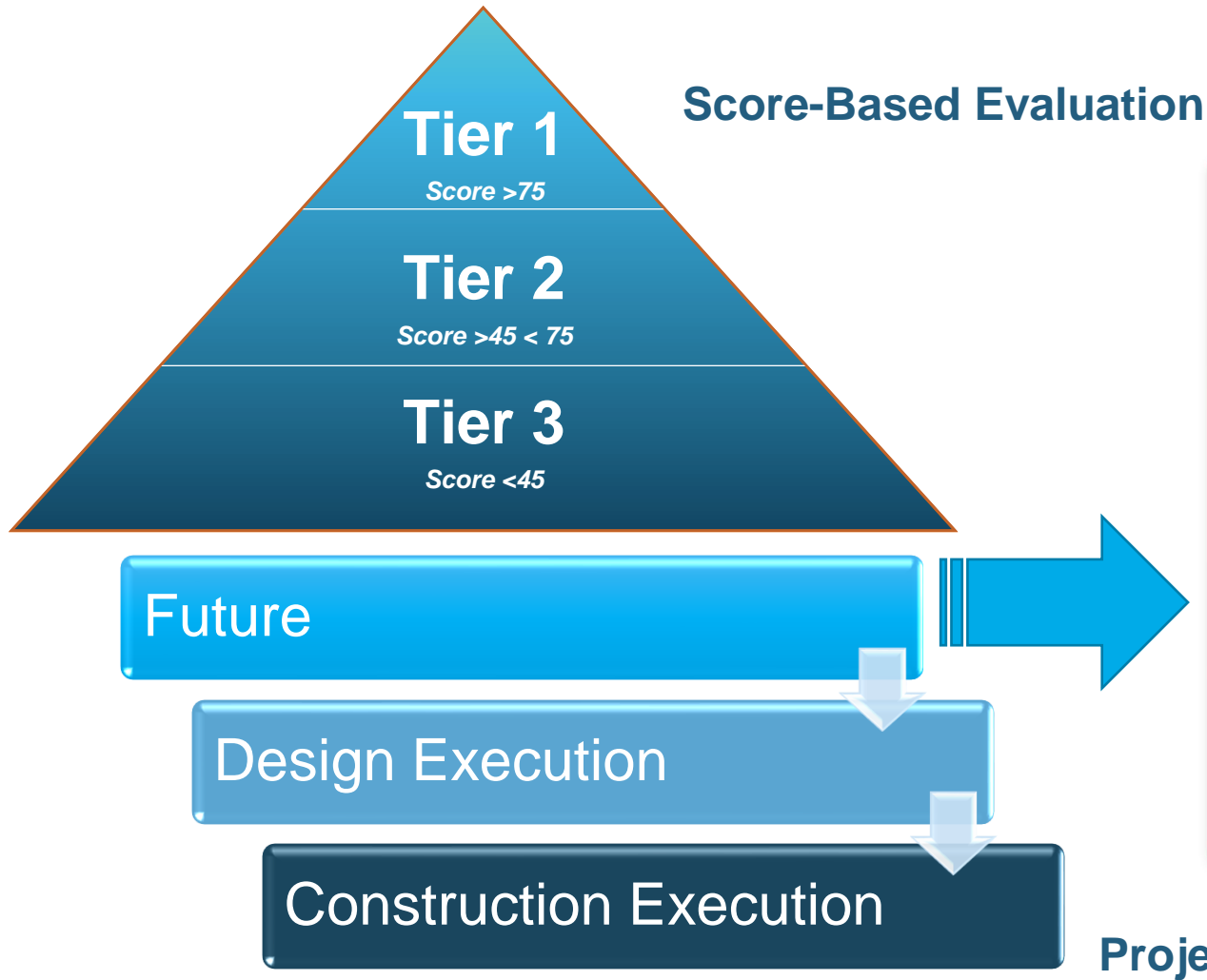
| | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | FY 31 | FY 32 | FY 33 | FY 34 | FY 35 |
|------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Program | \$51 | \$68 | \$183 | \$2,236 | \$4,707 | \$5,078 | \$5,578 | \$7,295 | \$8,917 | \$14,194 | \$14,994 |
| Projects | \$91,854 | \$139,665 | \$244,525 | \$287,679 | \$236,379 | \$179,478 | \$149,933 | \$128,988 | \$128,060 | \$157,730 | \$225,542 |
| Projects From Programs | \$71,364 | \$53,488 | \$47,134 | \$47,885 | \$20,030 | \$3,069 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Total | \$163,269 | \$193,221 | \$291,841 | \$337,800 | \$261,115 | \$187,625 | \$155,511 | \$136,283 | \$136,978 | \$171,924 | \$240,536 |

10-Year Wastewater CIP Outlook



Financial figures in \$1,000s and rounded

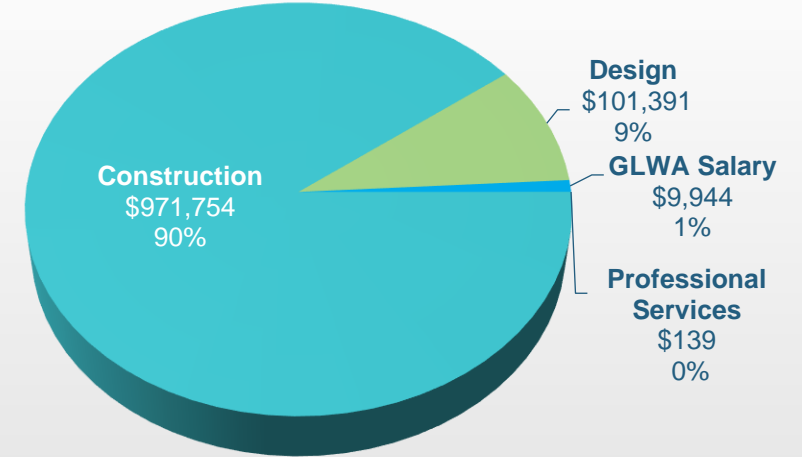
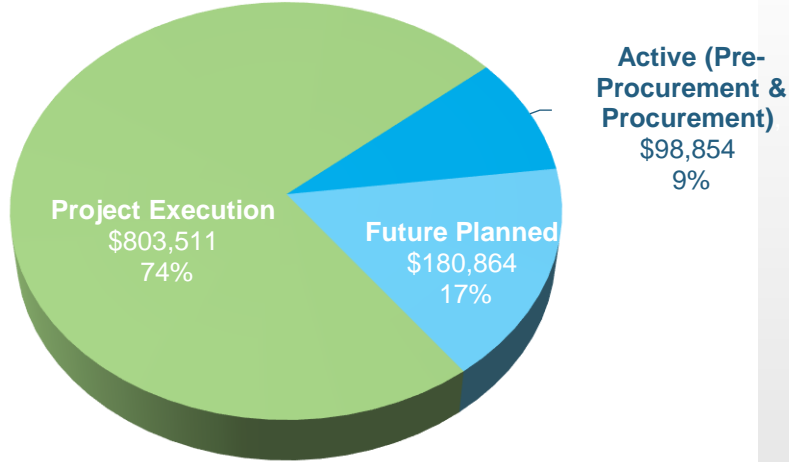
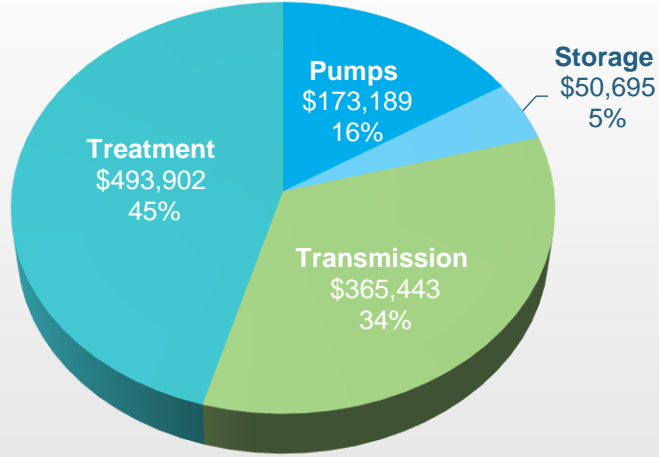
FY 2026 - 2030 CIP PRIORITIZATION



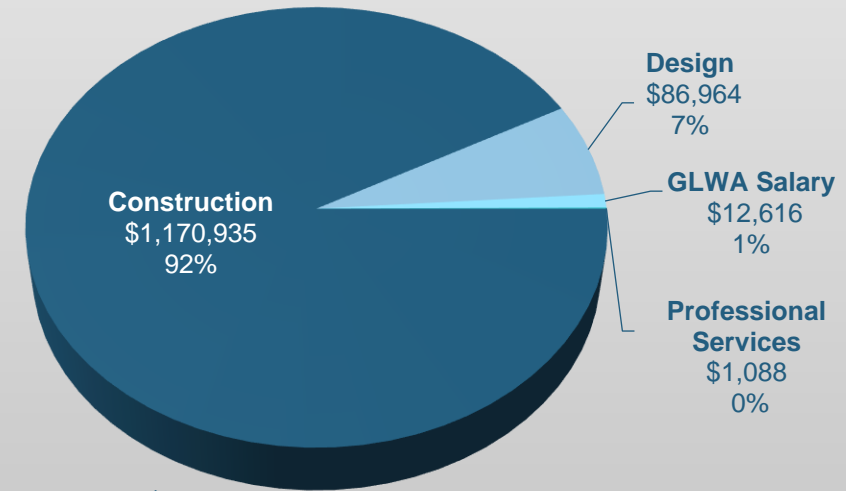
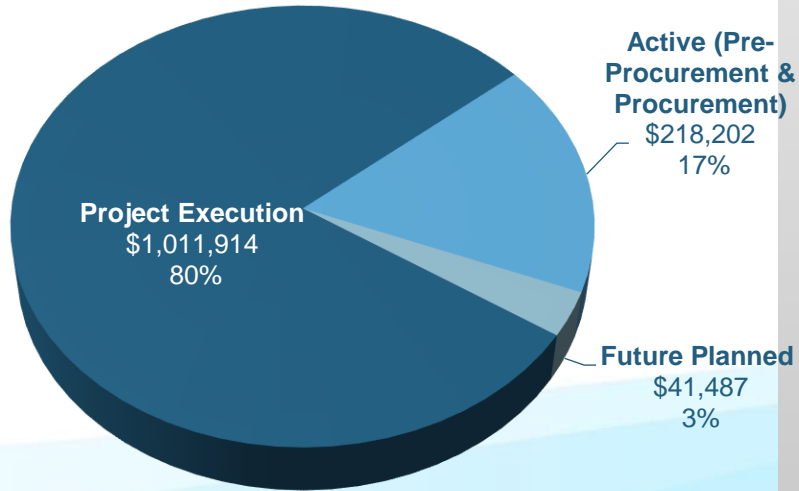
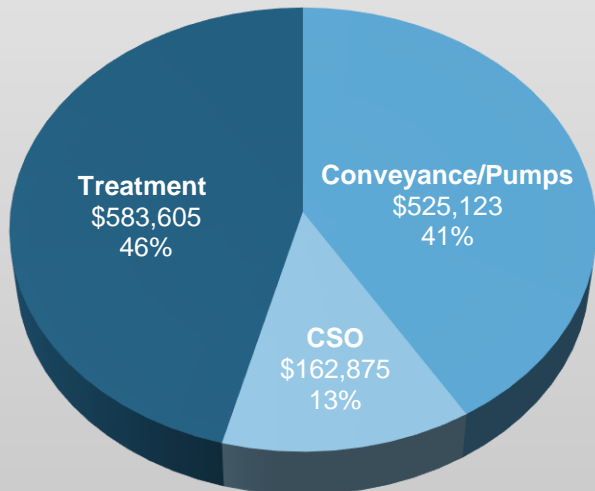
- Holistic Decision Factors
 - Predecessor Projects
 - Delivery Flexibility
 - Funding Source
 - Financial Plan
 - Proactive Planning
 - Constructability
 - Operational Considerations
 - Efficient Resource Allocation
 - Integrated Asset Management

FY 2026-2030 CIP STATISTICS AND RECAP

WATER



WASTEWATER



Financial figures in \$1,000s and rounded

CIP PUBLIC DASHBOARD



CIP Delivery Team



FY 2026 - 2030 CIP DOCUMENT

- 💧 CIP at a glance
- 💧 Project summaries
- 💧 Water and Wastewater BCEs
- 💧 Summary tables per various categories
- 💧 GIS Maps
- 💧 Integrated master schedule
- 💧 Added project photos to BCEs
- 💧 One Pager truncated text clarifications



Page 1
CIP Number: 114018

Project Title: Springwells WTP - Service Building Electrical Substation and Miscellaneous Improvements

Project Status: Future Planned - Within Five Year Plan
Class Lvl 1: Water
Class Lvl 2: Treatment Plants and Facilities
Class Lvl 3: Springwells
Lookup Location: Water Treatment Plants
 Project New to CIP:

- Innovation
- WW Master Plan
- Water Master Plan Right Sizing
- Redundancy
- Linear Assets Outside of Facilities
- Predecessor Project(s)



Service Building Electrical Substation

Project Engineer/Manager: Justin Kietur
Director: Tim Kuhns

Project Score
62.7

Problem Statement:

The electrical substation located inside the Service Building provides electrical service to the entire service building including the filter wash water pumping units. The existing electrical substation has experienced corrosion to its interior components and electrical cables. As a result the substation does not automatically switch-over during power trips and requires manual switch-over. This substation provides power to the filter wash water pumps and if there are power disruptions associate...[See BCE Report for more information...](#)

Scope of Work/Project Alternatives:

Project will be delivered using a progressive design-build project delivery. The scope of improvements will generally include:

1. Replacement of the electrical substation in the 1958 Service Building
2. Connection of replacement electrical substation to Ovation for status monitoring
3. Replacement of electrical panel in 1930 plant and new conduit and cable runs to the associated equipment
4. Rehab of masonry on exterior of phosphoric acid fill station
5. Insulation of piping and pipe chase...[See BCE Report for more information...](#)

Other Important Info:

None

Project Title: Springwells WTP - Service Building Electrical Substation and Miscellaneous Improvements

Current Expenses (All figures are in \$1,000's)
"Total Costs" include costs outside of the 10 year planning window
"Design & Construction costs are inclusive of salaries where salaries are not defined"

| Activity Name | Total Costs | Actual Costs | Prior FYs | FY25 | FY26 | FY27 | FY28 | FY29 | FY30 | 5 Year Total | FY31-35 |
|-----------------------|----------------|--------------|------------|------------|------------|------------|--------------|----------------|--------------|----------------|------------|
| GLWA Salaries | \$178 | \$0 | \$0 | \$0 | \$0 | \$0 | \$75 | \$75 | \$28 | \$178 | \$0 |
| Professional Services | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Design/Engineering | \$2,163 | \$0 | \$0 | \$0 | \$0 | \$0 | \$58 | \$1,717 | \$388 | \$2,163 | \$0 |
| Totals | \$2,340 | \$0 | \$0 | \$0 | \$0 | \$0 | \$133 | \$1,791 | \$416 | \$2,341 | \$0 |



WHAT'S NEW - CIP PUBLIC DASHBOARD



- First CIP public facing dashboard
- Reflects current CIP document
- Applies filters to derive at data

GLWA Great Lakes Water Authority

Careers Financials Assistance Contact Login

ABOUT OUR SYSTEM MEMBERS VENDORS INVESTOR RELATIO

CAPITAL IMPROVEMENT VIEWER

CAPITAL IMPROVEMENT VIEWER

CIP PUBLIC DASHBOARD

CLICK HERE

CAPITAL IMPROVEMENT PLAN - DISCUSSION DRAFT #1 2026-2030

Download the Discussion Draft #1 Capital Improvement Plan (CIP) 2026 - 2030 for a look at GLWA's plans for maintaining and improving the regional system.

- CIP Report FY26-30 - Discussion Draft 1
- CIP FY26-30 - Appendix A
- CIP FY26-30 - Appendix B
- CIP FY26-30 - Appendix C

GLWA Great Lakes Water Authority

Total Cost: \$0 to \$908,270

Project Start Fiscal Year: 2025 to 2032

Reset Filters

Project Status: All

Activity Category: All

CIP Budget: All

Project Location: All

Key Areas: All

Facility: All

Links to Appendix A/B : Business Case Evaluation (BCE)

| Link | CIP # | CIP Title |
|------------------------|--------|---|
| 111001 | 111001 | Lake Huron WTP, Low-Lift, High Lift and Filter Backwash Pumping System Ir |
| 111010 | 111010 | Lake Huron WTP Filtration Improvement |
| 111012 | 111012 | LHWTP-Flocculation Improvements |
| 111013 | 111013 | Lake Huron Water Treatment Plant Fireloop and Plant Water Improvements |
| 112003 | 112003 | Northeast Water Treatment Plant High-Lift Pumping Station Improvements |
| 112007 | 112007 | NEWTP-Structural Repairs |
| 112008 | 112008 | Northeast Water Treatment Plant Filter Replacement |
| 113003 | 113003 | Southwest Water Treatment Plant Low- and High lift Pumping station Impro |
| 113010 | 113010 | Southwest Water Treatment Plant Flocculation Improvements |

CIP Budget

| CIP: CIP Name | FY 25 | FY 26 | FY 27 | FY 28 | FY 29 | FY 30 | FY 31 |
|--|-------|----------|----------|----------|----------|----------|----------|
| 111001 - Lake Huron WTP, Low-Lift, High Lift and Filter Backwash Pumping System Improvements | \$0 | \$11,741 | \$16,224 | \$25,559 | \$29,612 | \$26,694 | \$18,995 |
| 111010 - Lake Huron WTP Filtration Improvement | \$0 | \$0 | \$0 | \$1,196 | \$1,196 | \$1,164 | \$11,413 |
| 111012 - LHWTP-Flocculation Improvements | \$0 | \$3,207 | \$8,647 | \$11,608 | \$10,486 | \$7,066 | \$0 |
| 111013 - Lake Huron Water Treatment Plant Fireloop and Plant Water Improvements | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$707 |

CIP Schedule & Gantt Chart

Group Expand

| Task | Start | End |
|---|----------|----------|
| 111001 - LAKE HURON WTP, LOW-LIFT, HIGH LIFT A... | 07/15/25 | 08/01/31 |
| 111010 - LAKE HURON WTP FILTRATION IMPROVE... | 07/02/27 | 07/06/34 |
| 111012 - LHWTP-FLOCCULATION IMPROVEMENTS | 01/01/26 | 06/30/30 |
| 111013 - LAKE HURON WATER TREATMENT PLANT... | 07/01/30 | 06/30/34 |
| 112003 - NORTHEAST WATER TREATMENT PLANT ... | 07/01/30 | 06/30/39 |

Months Years

CIP - GLWA

Microsoft Power BI (powerbigov.us)



CIP – Capital Improvement Plan

RECAP & NEXT STEPS



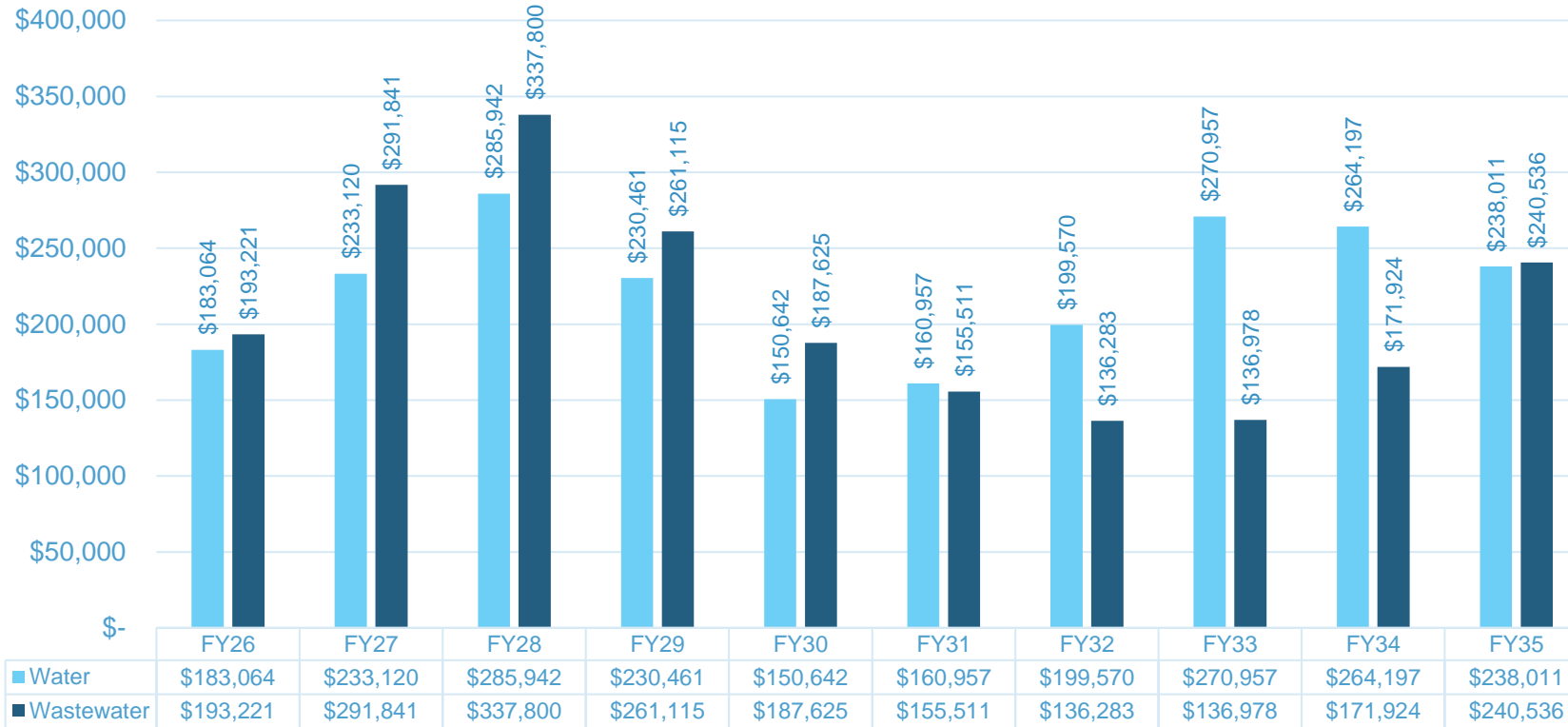
CIP Delivery Team



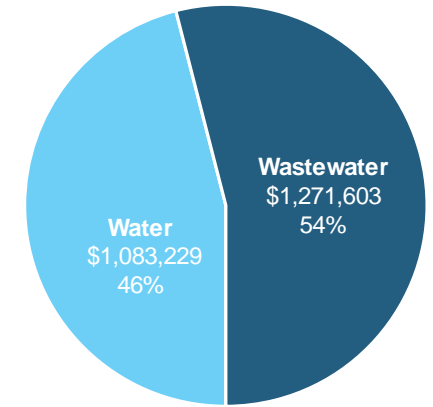
WATER & WASTEWATER CIP FY 2026 - 2035

(10 YEAR PROJECTIONS)

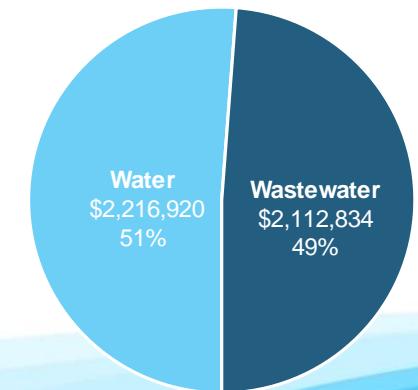
10 Year CIP



CIP FY 26-30 (5 Year) Business Unit



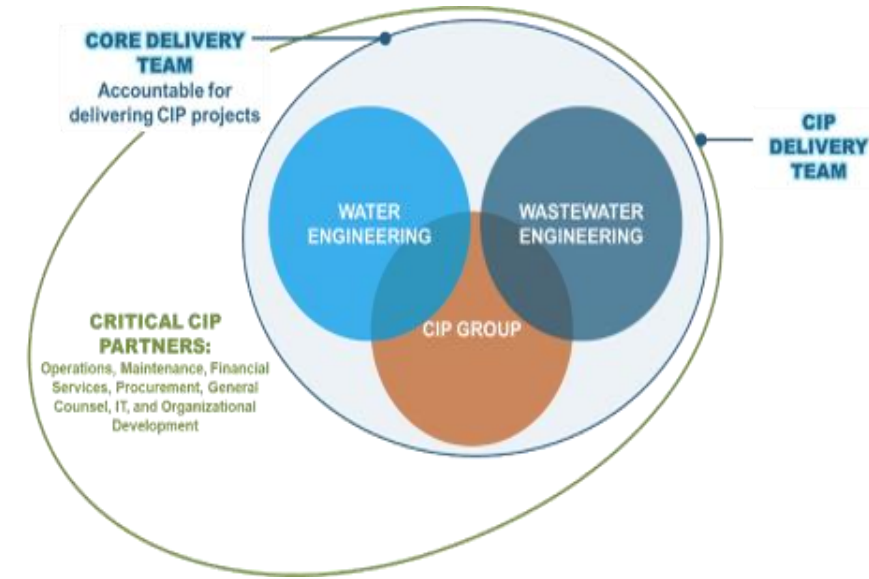
CIP FY 26-35 (10 Year) Business Unit



Financial figures in \$1,000s

KEY TAKEAWAYS

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- Opportunities for Stakeholders to provide input during development
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- Needed projects from all areas of the organization to promote redundancy, resiliency, public health and safety
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QUESTIONS & THANK YOU



CIP Delivery Team

