

CIP Program Update CAPITAL PLANNING COMMITTEE

September 10, 2024



Jody Caldwell, PE, Chief Planning Officer

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

AGENDA

💧 CIP Update

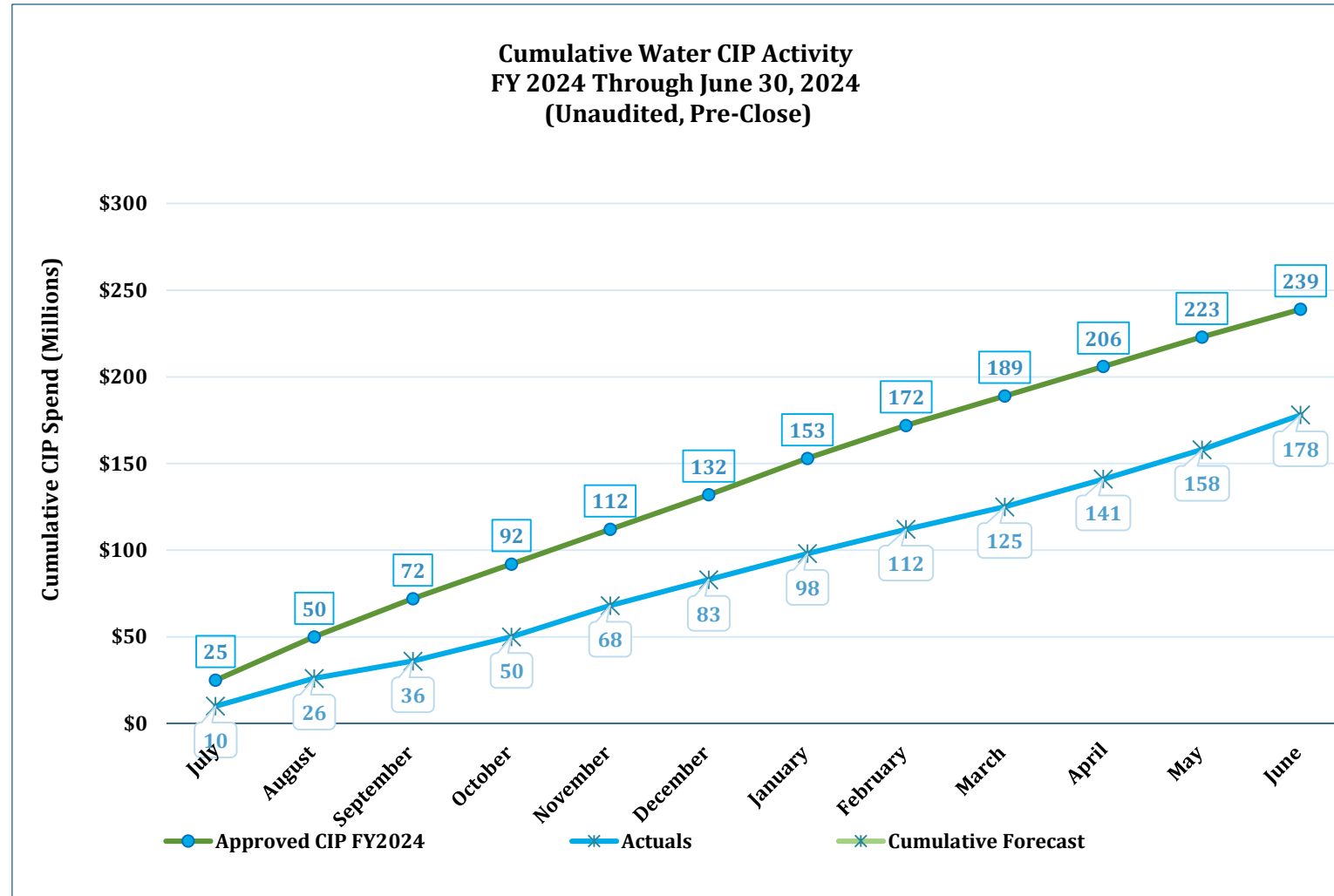
- 💧 FY 24 Key Performance Indicators (KPIs)
- 💧 FY 25 CIP Delivery Targets
- 💧 FY 26-30 CIP Update
- 💧 Program Management Plan (PMP) Rollout
- 💧 CIP Delivery Teams-Recruitment Update
- 💧 What's Next

💧 Program Management Updates



KEY PERFORMANCE INDICATORS

WATER CUMULATIVE - FY 24



Current Status:

The water system incurred \$178 million of CIP costs through June 2024.

This is 74% of the FY 2024 monthly *Approved CIP 2024-2028*.

WATER VARIANCE – MAJOR DRIVERS

Cause	Detail	Total Variance FY 24*
Major Project Rebidding	Phase 2 of 96-inch relocation project (CIP 122004) Contract was re-bid and delayed award of phase 2 award of Work by approximately 6 months. This delay shifted spend for this project by the 6-months.	\$43,722,597
Supply Chain Challenges	GLWA is still dealing with the challenges of supply chain issues in the delivery of heavy equipment. For Lake Huron High-Lift Pumping Project (CIP 111009), GLWA is still awaiting delivery of three (3) high lift pumping units. This has delayed contract spend in this fiscal year.	\$6,801,104
FY 25-29 Alignment Shifts	Downriver Transmission Main Project (CIP 122016) design contract (1803942) was put on hold in December 2022 during CIP alignment process to manage a projected overspend issue in FY 2024. Further, a potential for new Huron Township customer prompted a re-evaluation of pipe diameter for phase 1 of this project, which has delayed bid of Phase 1 of this project.	\$5,020,639

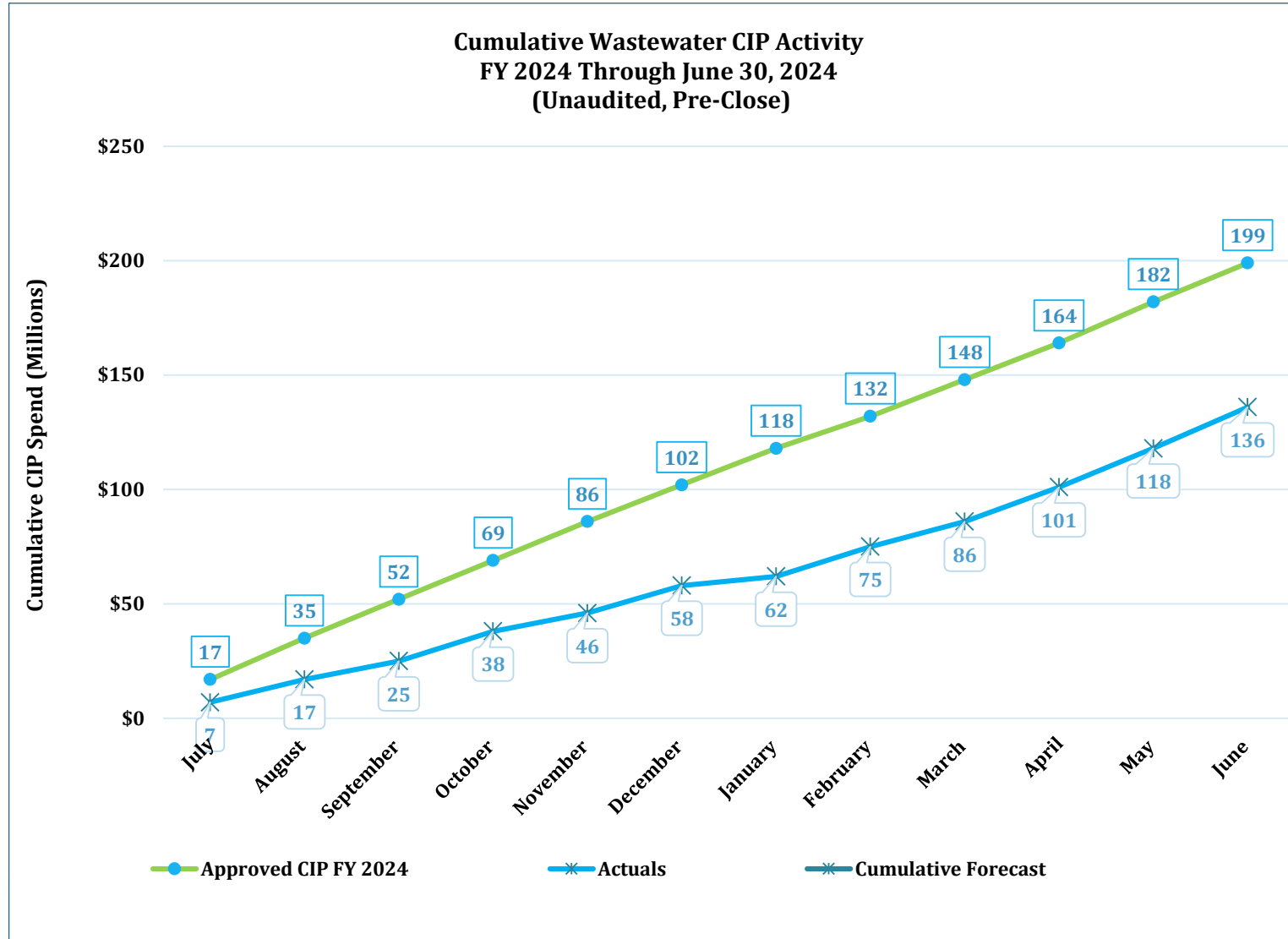
Note :-

If the 96-inch relocation project (CIP 122004) impacts from delay were excluded from CIP projected spend through June 30, 2024, CIP Water Delivery would be at approximately **88%** of Board Approved CIP 2024 – 2028.

*** Year-end Actuals vs Planned FY24.**

KEY PERFORMANCE INDICATORS

WASTEWATER CUMULATIVE- FY 24



Current Status:

The wastewater system incurred \$136 million of CIP costs through June 2024.

This is 68% of the FY 2024 monthly Approved CIP 2024-2028.

WASTEWATER VARIANCE – MAJOR DRIVERS

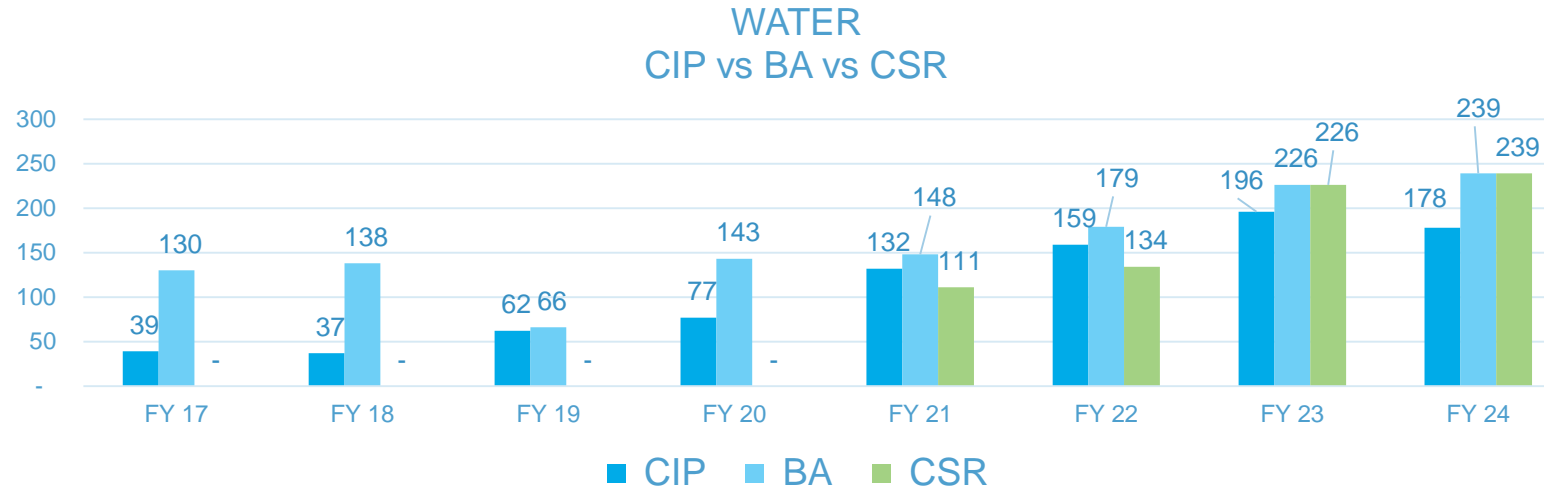
Cause	Detail	Total Variance FY 24*
Permitting Delays	Freud & Conner Creek Pump Station Improvements project (CIP232002) the award of the project has been delayed while GLWA team continues to work through the City of Detroit permitting process.	\$17,622,862
SRF delays	WRRF PS 1 - Project was delayed by SRF funding being provided for the project and thus the original start date and all associated elements by approximately 7 months. SRF funding provided access to low interest loan and approximately \$10M in principle forgiveness.	\$7,017,271
Value Engineering Delays	WRRF Aeration Improvements 1 and 2 (CIP 212008) bids were \$125 Million higher than Engineers estimate. Value engineering took about 9 months, and the award was delayed ensuring proper review of the estimate, opportunities for value engineering prior to the award. The project is now award and moving forward. No significant spending is projected on this project in FY 24.	\$3,919,769
Conveyance Projects Budgets	The WW team is working on reviewing Field Services projects budgets such as CIP 260209, CIP 222002, CIP 260206 to align projections with anticipated work and investigate ways to address emergency work.	\$19,386,040

Note :-

If all the above projects impact from delay were excluded from CIP projected spend through June 30, 2024, CIP Wastewater Delivery would be at approximately **87%** of Board Approved CIP 2024 – 2028.

*** Year-end Actuals vs Planned FY24.**

ENTERPRISE RESILIENCY WATER CIP SPEND-HISTORY



WATER CIP DELIVERY

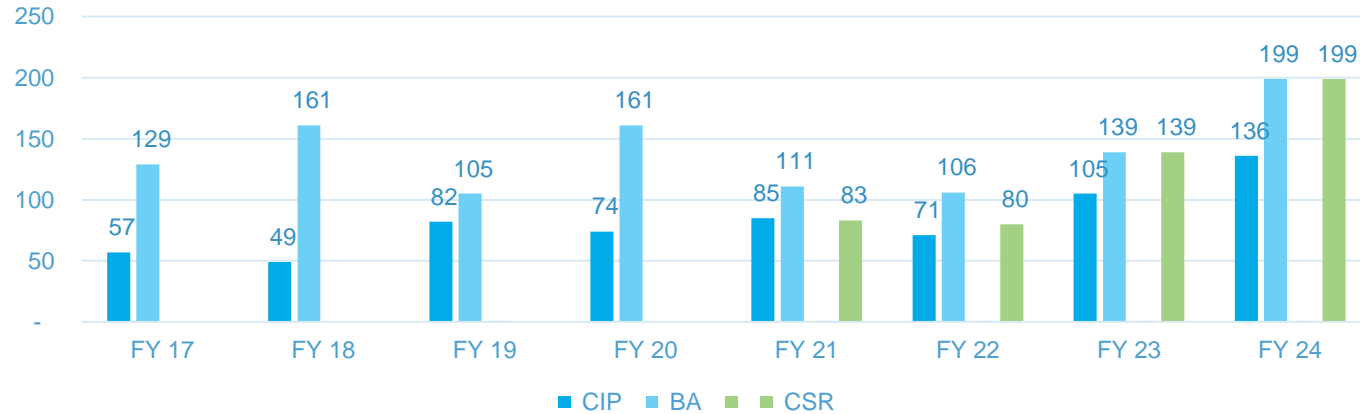
	CIP Actual Spend*	BA *	% BA	CSR*	% CSR
FY 17	39	130	30%	-	
FY 18	37	138	27%	-	
FY 19	62	66	94%	-	
FY 20	77	143	54%	-	
FY 21	132	148	89%	111	119%
FY 22	159	179	89%	134	119%
FY 23	196	226	87%	226	87%
FY 24	178	239	74%	239	74%

**In Million Dollars*

ENTERPRISE RESILIENCY WASTEWATER CIP SPEND-HISTORY



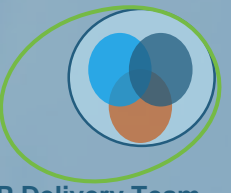
WASTEWATER
CIP vs BA vs CSR



WASTEWATER DELIVERY

	CIP Actual Spend*	BA *	% BA	CSR*	% CSR
FY 17	57	129	44%	-	
FY 18	49	161	30%	-	
FY 19	82	105	78%	-	
FY 20	74	161	46%	-	
FY 21	85	111	77%	83	102%
FY 22	71	106	67%	80	89%
FY 23	105	139	76%	139	76%
FY 24	136	199	68%	199	68%

**In Million Dollars*



CIP Delivery Team

FY 25 CIP DELIVERY TARGETS

BOARD APPROVED FY 25 WATER AND WASTEWATER BUDGETS



WATER CIP COMPARISON

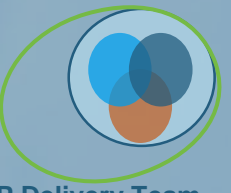
Financial figures are in thousands of dollars (\$1,000's)

CIP Document	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	5-Year Total
Approved Water CIP FY 2024-2028	\$239,260	\$200,422	\$176,034	\$165,813	\$205,087	\$210,312	\$986,616
Water CIP FY 2025-2029		\$207,333	\$209,752	\$227,823	\$236,331	\$190,550	\$1,071,788
Difference		\$6,910	\$33,718	\$62,009	\$31,244	(\$19,761)	\$85,173
Difference %		3.45%	19.15%	37.40%	15.23%	-9.40%	8.63%

WASTEWATER CIP COMPARISON

Financial figures are in thousands of dollars (\$1,000's)

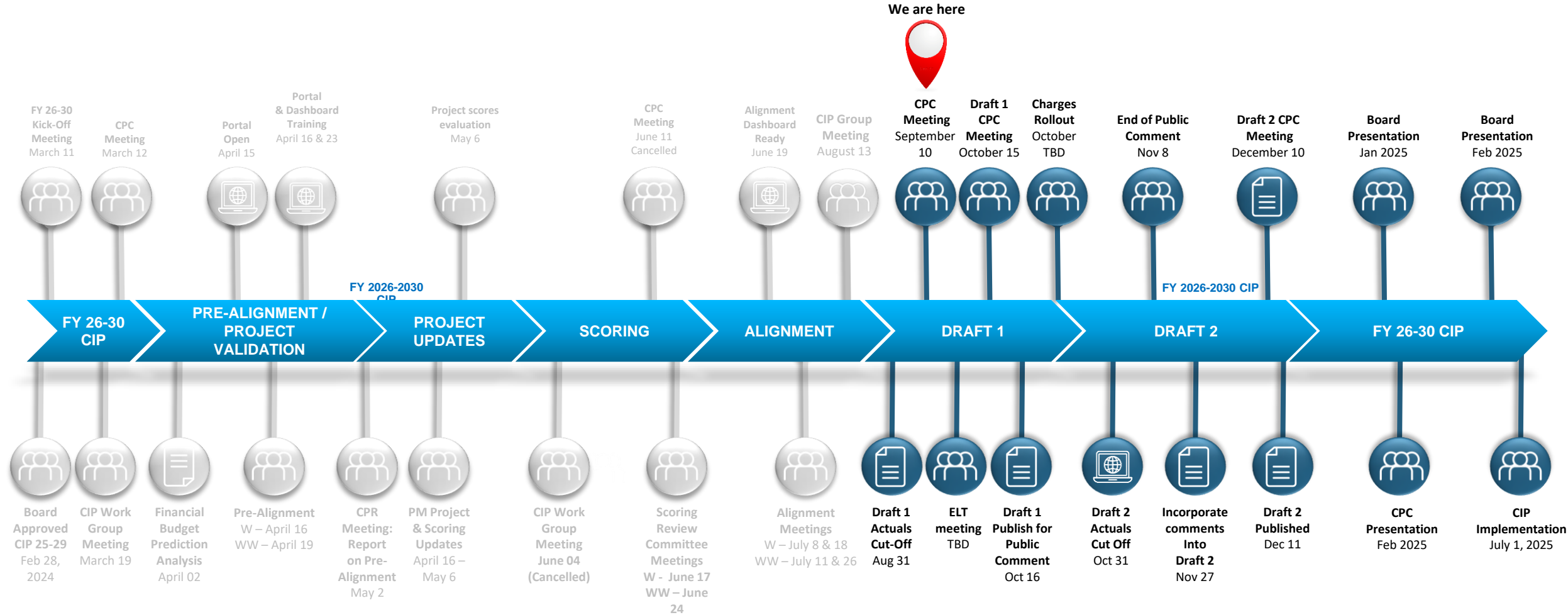
CIP Document	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	5-Year Total
Approved Wastewater CIP FY 2024-2028	\$199,061	\$190,159	\$159,044	\$133,732	\$116,180	\$135,663	\$798,176
Wastewater CIP FY 2025-2029		\$169,189	\$212,693	\$216,231	\$201,995	\$182,417	\$982,525
Difference		(\$20,970)	\$53,649	\$82,499	\$85,815	\$46,753	\$184,349
Difference %		-11.03%	33.73%	61.69%	73.86%	34.46%	23.10%



CIP Delivery Team

FY 26-30 CIP UPDATE

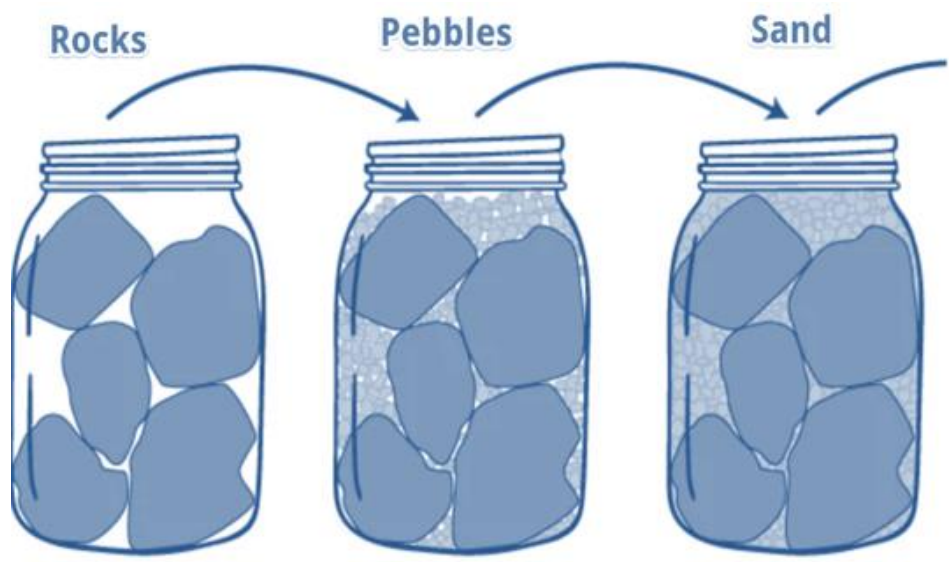
CIP FY 2026-2030 ROAD MAP



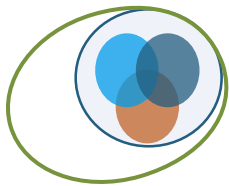
PROJECT SCORING - FY 26-30 CIP STATISTICS



	Tier 1 <i>Score >75</i>	Tier 2 <i>Score >45 < 75</i>	Tier 3 <i>Score <45</i>
Water	53%	40%	7%
Wastewater	48%	49%	3%



ALIGNMENT PROGRESS-WATER



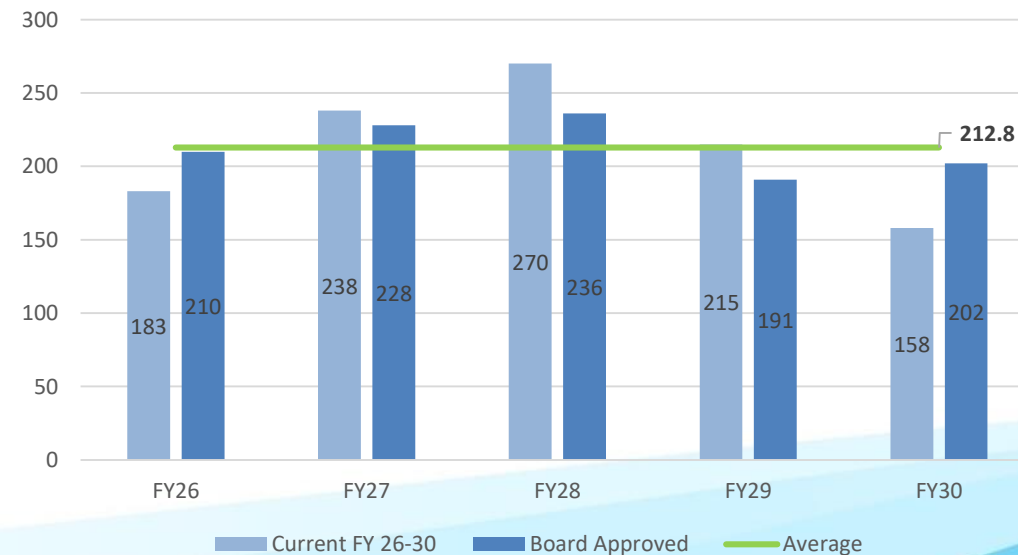
CIP Delivery Team

💧 FY 26-30 CIP – Alignment with Financial Plan

FY 26-30	Water						Total	Average
	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 26-30	FY 26-30
Board Approved	207	210	228	236	191	202	1067	213.4
Current Planning Scenario*	175	183	238	270	215	158	1064	212.8

* As of June-actuals and August 30, 2024, PMs cost and schedule update

Board Approved vs. Current - Water (in millions)



ALIGNMENT PROGRESS-WATER PROJECT LIST



CIP Delivery Team

CIP No.	Description	Alignment Change
111013	Lake Huron Water Treatment Plant Fireloop and Plant Water Improvements	Delay Start
112003	Northeast Water Treatment Plant High-Lift Pumping Station Improvements	
113003	Southwest Water Treatment Plant Low- and High lift Pumping station Improvements	
114002*	Springwells Water Treatment Plant, Low-Lift and High-Lift Pumping Station Improvements	
114005	Springwells Water Treatment Plant, Administration Building Improvements & Underground Fire Protection Loop	
114010	Springwells Water Treatment Plant, Yard Piping and High-Lift Header Improvements	
115006*	Water Works Park Site/Civil Improvements	
115007	Water Works Park High Lift Pumping Station Modernization	
170803*	Reservoir Inspection, Design, and Construction Management Services Phase III	
171500*	Roof Replacement at WWP, SP, LH, NE, SW, NSC, Orion, Franklin, and Conner Creek Facilities	
171502*	Lake Huron and Southwest Roof Replacement	
381000*	Power Quality: Electric Metering Improvement Program	
383300*	Masonry Replacement and Rehabilitation Program	
		EAC Change (-)
112008	Northeast Water Treatment Plant Filter Replacement	EAC Change (+)
122007	Merriman Road Water Transmission Main Loop	
122016	Downriver Transmission Main Loop	
		Cancelled
111001	Lake Huron Water Treatment Plant, Low-Lift, High Lift and Filter Backwash Pumping System Improvements	Early Start
		Change Duration (-)

**Delayed by 2 or more Years*

ALIGNMENT PROGRESS-WASTEWATER

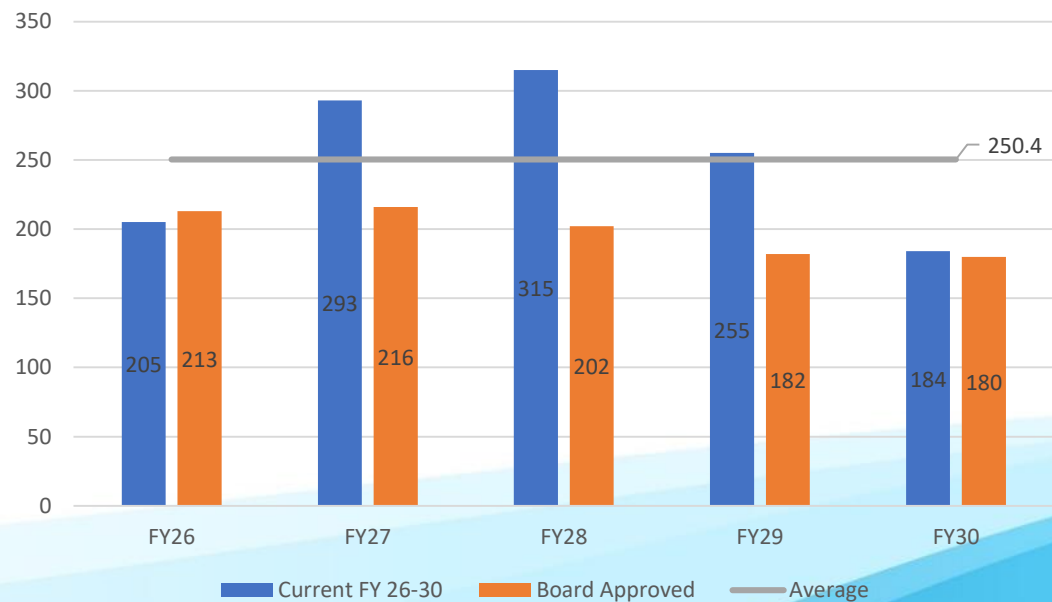


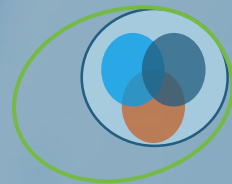
💧 FY 26-30 CIP- Alignment with Financial Plan

FY 26-30	Wastewater						Total	Average
	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30	FY 26-30	FY 26-30
Board Approved	169	213	216	202	182	180	994	198.6
Current Planning Scenario*	178	205	293	315	255	184	1252	250.4

** As of June-actuals and August 30, 2024, PMs cost and schedule update*

Board Approved vs. Current - Wastewater (in millions)

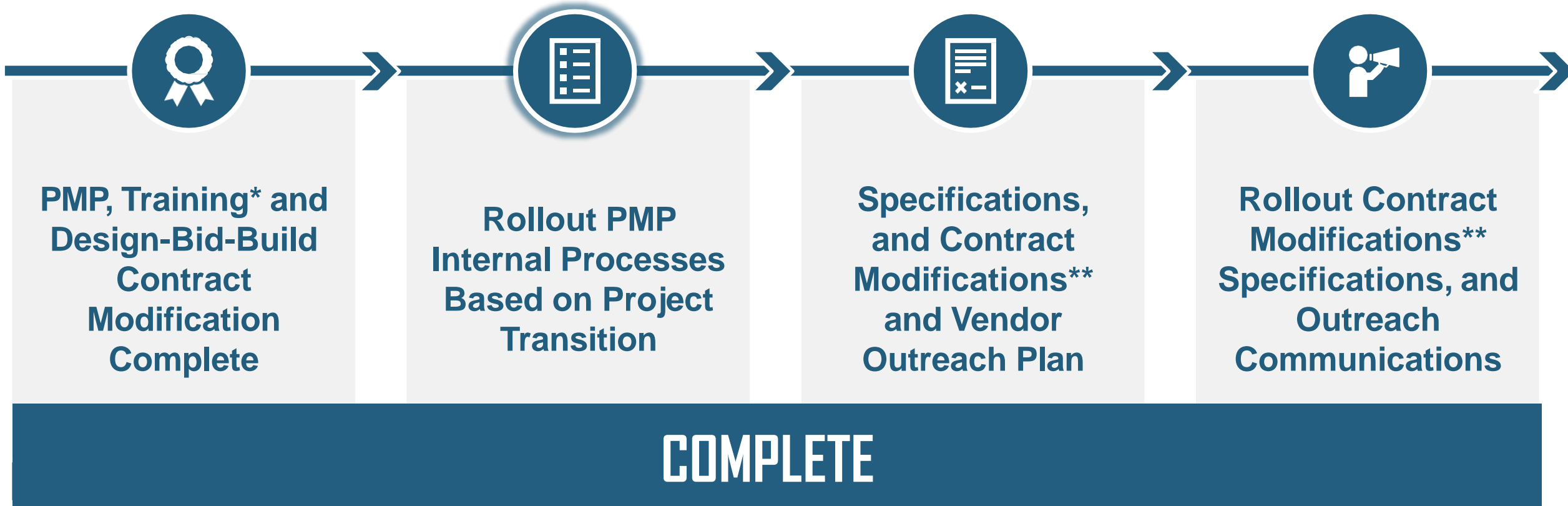




CIP Delivery Team

PROGRAM MANAGEMENT PLAN (PMP) ROLLOUT

PMP IMPLEMENTATION AND ROLLOUT



* PMP Chapter 15-CIP Planning-Fall 2024

** Design Services Contract-In progress

PMP RESOURCES

**Procurement
Vendors Webpage**

**Unified Division 1
Standard
Specifications**

Updated Contracts

**Vendor Outreach
Event**

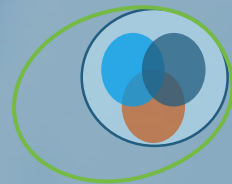
Copy of PMP Chapters*

Project Managers

Procurement

September 26, 2024

*** Updated as of July 2024**



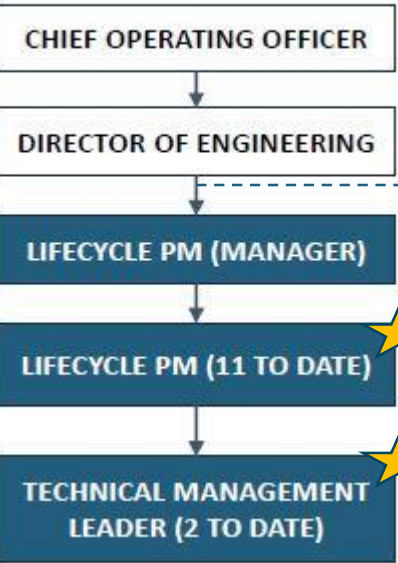
CIP Delivery Team

CIP DELIVERY TEAM IS GROWING

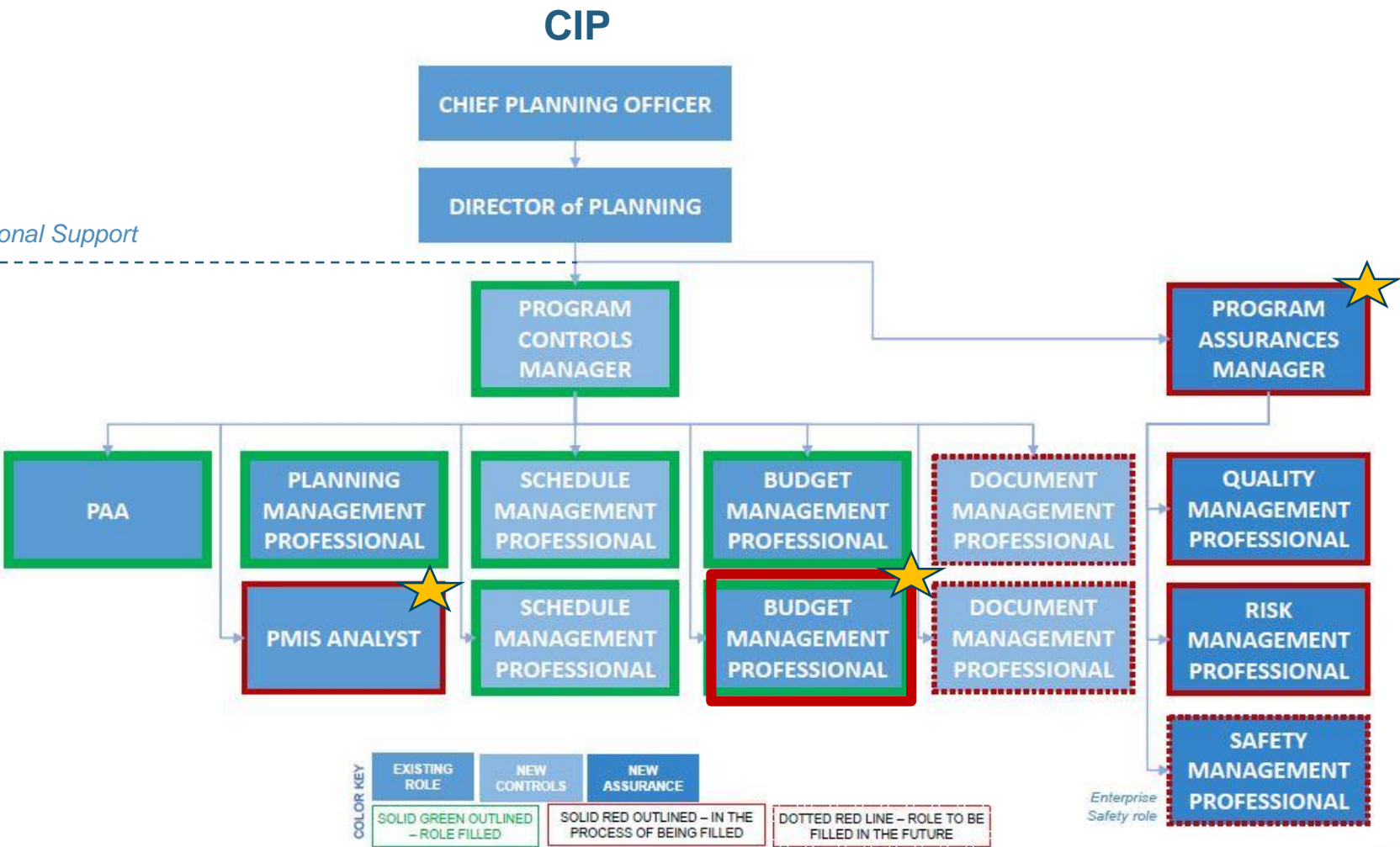
CIP DELIVERY TEAMS ARE GROWING

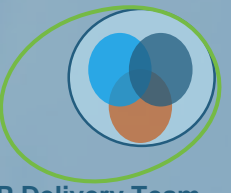


Water & Wastewater



Cross Functional Support





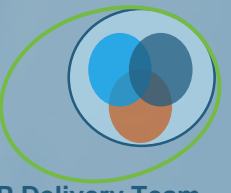
CIP Delivery Team

WHAT'S NEXT

WHAT'S NEXT – CIP



- **Continue Implementation of PMP**
 - Cost Loaded P6 schedules
 - Monthly P6 schedule updates
 - Milestone Project Phase Update
 - Vendor Outreach (September 26, 2024)
- **FY 2026 - 2030 CIP**
 - Finalize Alignment
 - Discussion Draft 1 October 15, 2024
- **Restart the PMIS Project (Contract by October 2024)**

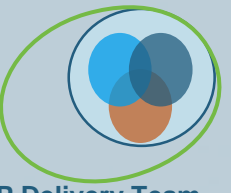


CIP Delivery Team

THANK YOU!

QUESTIONS

PROGRAM MANAGEMENT UPDATE



CIP Delivery Team



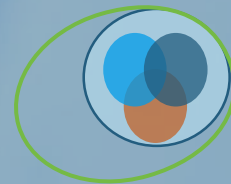
AECOM

Michael McClure, AECOM

TODAY'S AGENDA – AECOM CONTRACT UPDATE



- **Task 2 – CIP Delivery Standard Operating Procedure (SOP) Delivery Status Update**
- **Task 4 – PMIS Selection and Implementation Status Update**
- **Task 5 – Project Administration & Project Controls and Report Status Update**
- **Task 7 – Engineering and Construction Staff Augmentation Status Update**
- **Task 9 – GLWA Supplemental Department Staff Augmentation Status Update**



CIP Delivery Team

Status Update - Task 2: CIP Delivery Standard Operating Procedure (SOP) Delivery

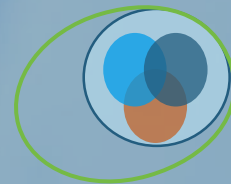
PMP COMPLETION & IMPLEMENTATION

- The **PMP** is complete, project managers and CIP Delivery Team leaders have been trained* and the PMP is implemented.
- An “**external PDF version**” of the PMP is available on Procurement’s page for information only to consultants and other vendors. **Note: The PMP is not a contractual document.**

* The final chapter training will be completed in the Fall

RELATED INITIATIVES

- **Revisions to Standard Contract Documents**
 - DBB, DB and PDB contracts – **Complete**
 - Unified Standard Division 1 Specifications – **Complete**
 - Engineering Design Contract – **Completion in August**
- **Vendor Partner Rollout**
 - A recording has been completed of a presentation that provides bidders an explanation, at a high level, of the changes to the contract documents and the reason for the changes.
 - A full, in-person, presentation will also be made at the Annual Procurement Vendor Event in September 2024.

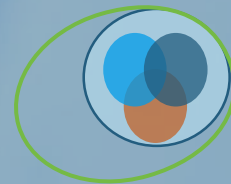


CIP Delivery Team

Status Update - Task 4: PMIS Selection and Implementation

TASK 4 PMIS SELECTION AND IMPLEMENTATION UPDATE

- AECOM assisting GLWA IT in PMIS implementation tasks.

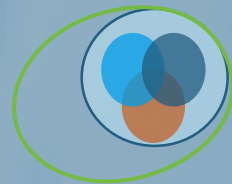


CIP Delivery Team

Status Update - Task 5: Project Administration & Project Controls, and Report

TASK 5 CIP PORTAL UPDATE

- **CIP Portal Enhancements**
- **Monthly Cost and Schedule Database Updates**
- **FY 26-30 CIP Plan Development Support**
- **CIP Portal Dashboard**



CIP Delivery Team

Status Update - Task 7: Engineering and Construction Staff Augmentation

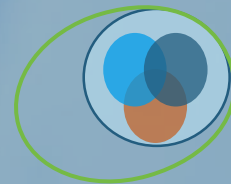
TASK 7 – ENGINEERING & CONSTRUCTION STAFF AUGMENTATION - UPDATE



Engineering Support (Support Ending May 2025)

- Continue to successfully transition wastewater projects to GLWA's Life Cycle Project Managers (LPM's).
- Provide Technical Support on various WRRF Projects as depicted in Table.
- Currently, providing one (1) FTE as Staff Augmentation to Wastewater Group.

Task Memorandum	O&M / CIP No.	Project Description
72034A.01	O&M WW	Multiple O&M Projects including Incineration Rehab 8, 10 & 11, B-House Rehab and Miscellaneous JOC's
72034A.02	CIP 211005	WRRF PS No. 2 Improvements Phase II
72034A.03	CIP 211007	WRRF PS #2 Bar Racks Replacements and Grit Collection System Improvements
72034.04	CIP 212008	WRRF Aeration Improvements 1 and 2
72034.04	CIP 261000	WRRF Rehabilitation of the Secondary Clarifiers
7203A.05	CIP 213006	WRRF Improvements to Sludge Feed Pumps at Dewatering Facilities
72034.08	CIP 260701	Conveyance System Infrastructure Improvements
72034A.10	CIP 260901	Rehabilitation of HAZMAT Facility at WRRF
72034A.12	CIP 260905	WRRF Plumbing Shop Renovation
72034A.15	CIP 277001	Baby Creek Outfall Improvements Project



CIP Delivery Team

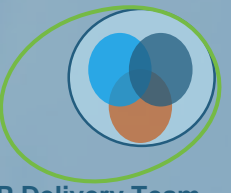
Status Update - Task 9: GLWA Supplemental Department Staff Augmentation

TASK 9 – SUPPLEMENTAL SUPPORT UPDATE

- **Recruiting Support**
- **Organizational Development and Training Support**
- **PMP Implementation**
- **CIP Delivery Leadership Support**

WHAT'S NEXT - RECAP

- Continue to Support Tasks 2, 4, 5, 7 and 9.



CIP Delivery Team

THANK YOU!

QUESTIONS