Update on Inner Harbor Water Treatment Campus Project

City Council Meeting

July 22, 2025

Presentation Overview

- Current Project Status Update
- Project Timeline
- Demonstration Plant
- Cost Model Update
- Future Project Topics

Current Treatment Campus Layout

Current Project Status Update

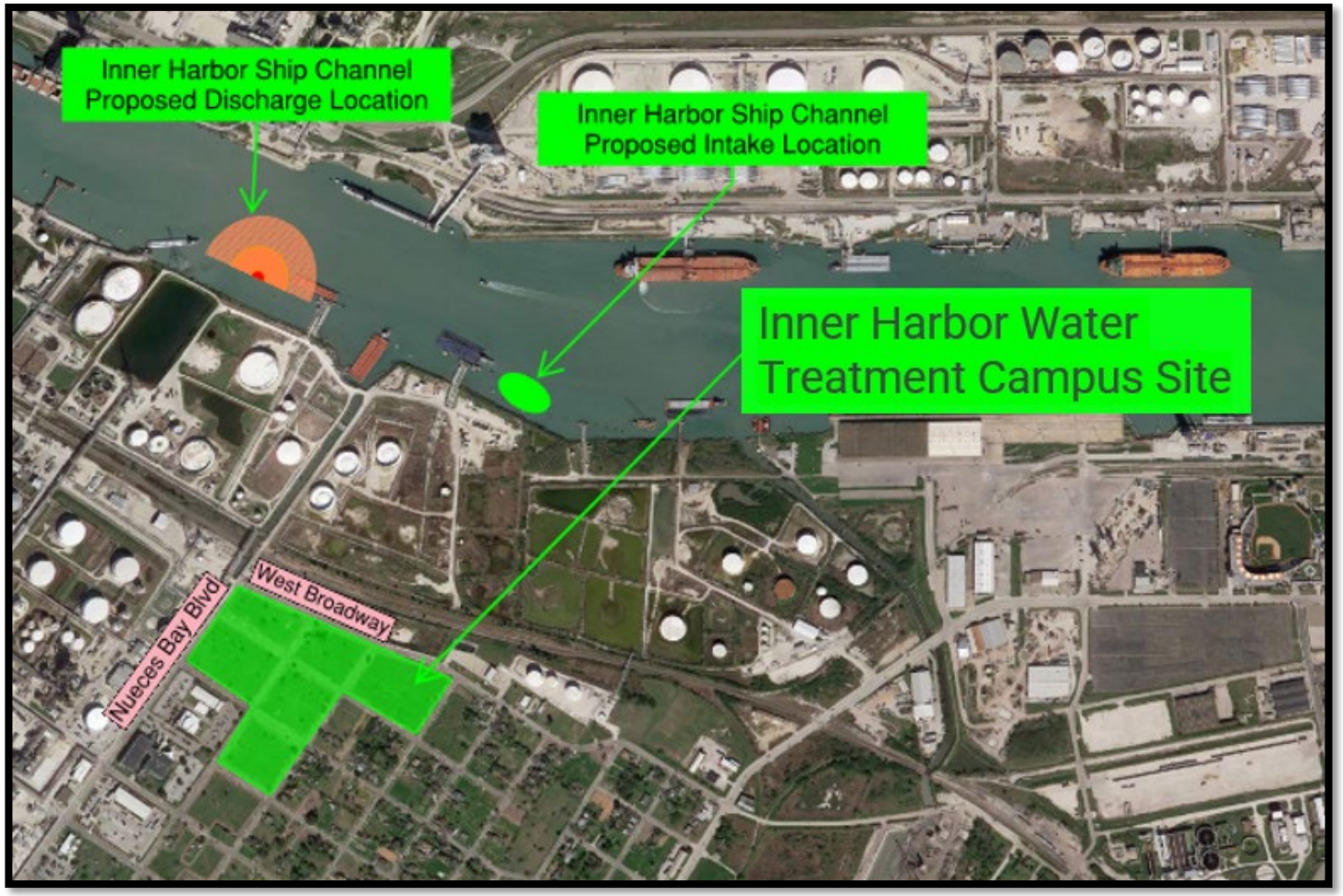
Project Overview:

Phase 1A – Complete

Phase 1B – Design, Early Works, and Guaranteed Maximum Price (GMP)

Phase 2 – Final Design and Construction

Phase 3 – Operating and Maintenance Services



Current Project Status Update

Current Status:

Phase 1A – Substantially Complete

Phase 1B – Start Date: April 15,2025

Contract amendments issued to date: 4 Total

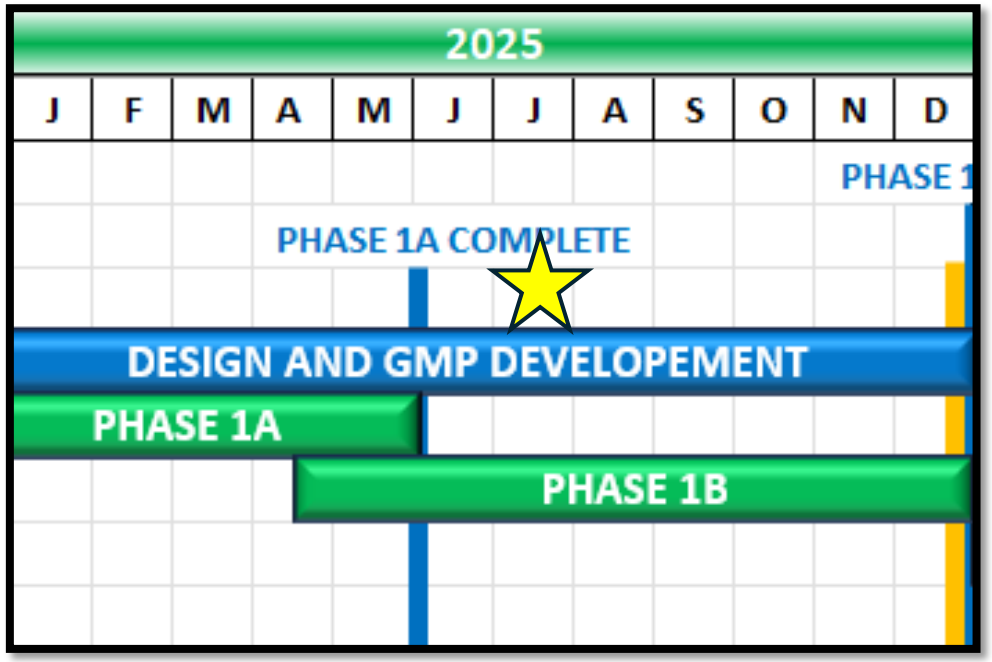
Demonstration Plant Schedule:

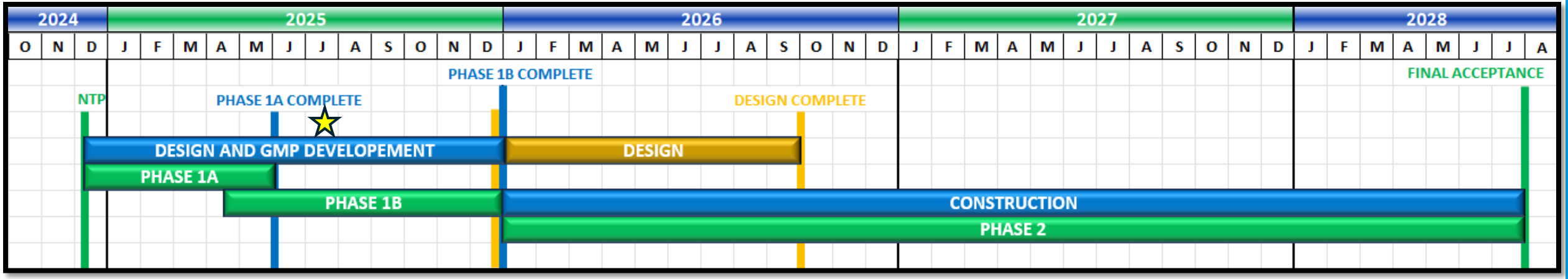
- Construction Completion: August 2025
- Operation Startup: August/September 2025
- TCEQ 30-Day Start: September/October 2025

Project Timeline

Current Status (★):

- Demonstration Plant in construction – 15% Complete
- Design development in progress
  - Amendment planned for July 29 City Council





Demonstration Plant

Demonstration Plant Schedule:

- Construction Start: June 2025
- Operation Startup: August/September 2025
- TCEQ 30-Day Start: September/October 2025

Construction Progress:

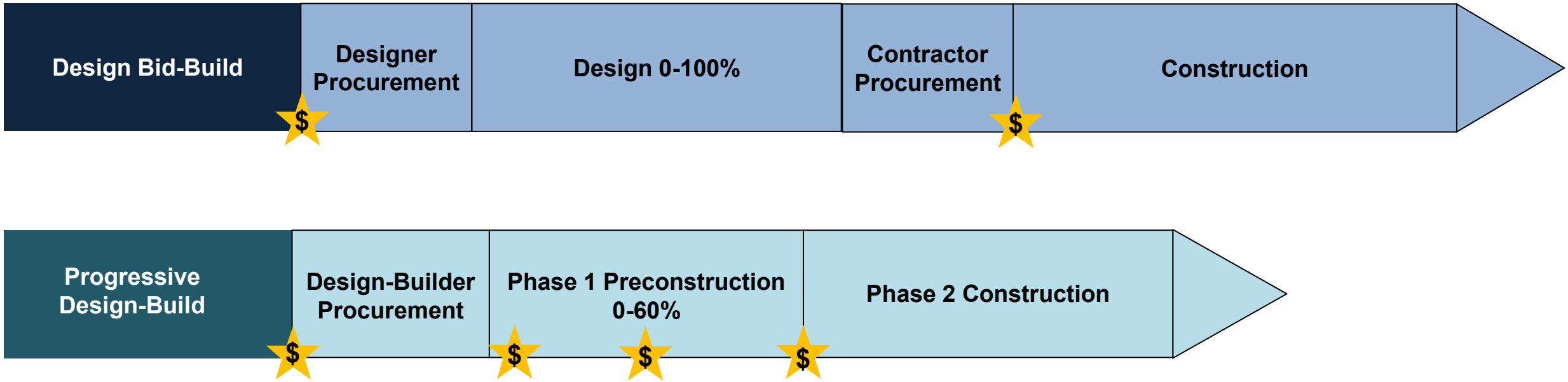
- Erosion control installation is complete
- Equipment deliveries in progress; All process treatment units received
- Discharge water line installation is 70% complete
- Site prep at plant site is 80% complete

Cost Model: Contract Requirement

Phase 1A Deliverable

"Design-Builder will develop a Cost Model that shall be a good faith estimate of the cost to deliver a fully functional and complete Project, inclusive of all costs to complete Phase 2, and shall be based on the assumptions and risks that are known at the time Design-Builder submits the Cost Model to City. The Cost Model shall contain the same information required in a Binding Construction Price Proposal and must include a narrative explaining risks, assumptions and contingencies."

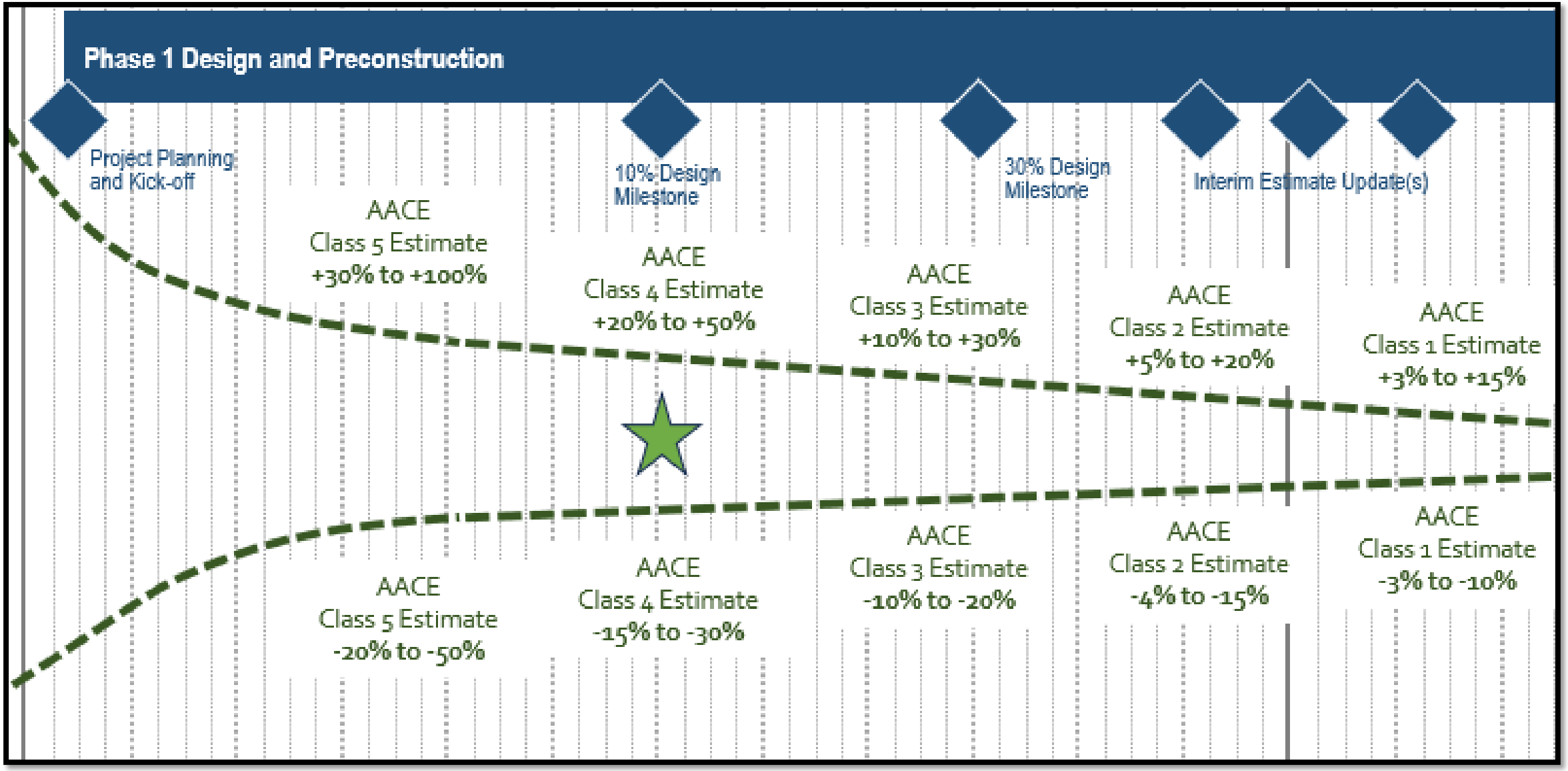
Cost Model: Project Cost Review Points



Design Bid-Build – approximately 10-12% of project costs committed before cost certainty

Progressive Design-Build – numerous opportunities to review cost models and cost certainty achieved at 8-10% of project costs

Cost Model: Cost Iteration Process



Cost Model: Impact to CCW Ratepayer

Rate Analysis:

	Initial Budget $757M	10% Cost Model $1.189B
Residential Average Monthly Increase	$9.96	$11.38
Residential Average Monthly Water Bill	$72.64	$74.06

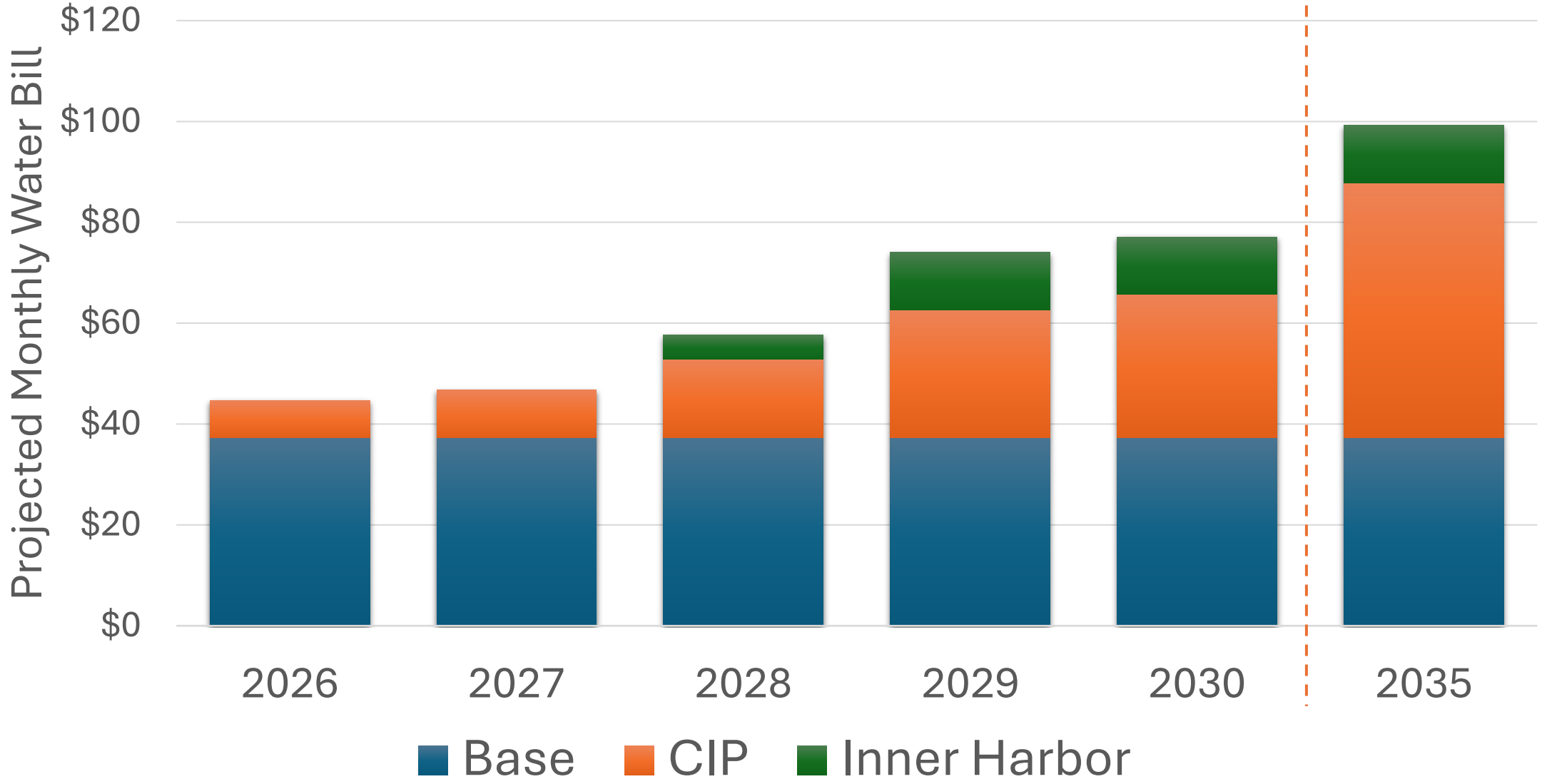
- Average baseline monthly water bill is projected to be $62.68
- Rates are forecasted for 2029, the year the full debt service and operation and maintenance cost will begin
- Residential average monthly increase based on use of 6,000 gallons per month

Cost Model: CCW Rate Payer Forecast

	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2035
Residential Average Monthly Water Bill w/o Inner Harbor	$37.29	$44.65	$46.73	$52.86	$62.68	$65.78	$87.85
Residential Average Monthly Water Bill w/ Inner Harbor	$37.29	$44.65	$46.73	$57.61	$74.06	$77.11	$99.24
10% Cost Model Increase	-	-	-	$4.75	$11.38	$11.33	$11.39

- Residential average monthly rates based on use of 6,000 gallons per month

Cost Model: CCW Rate Payer Forecast



Cost Model: Cost of Water

	Initial Budget	10% Cost Model
All in Capital Costs	**$757 M**	**$1.189 B**
Debt Service	$43.0 M/yr	$68.1 M/yr
Annual Operating Costs	$44.0 M/yr	$32.0 M/yr
Annual Costs (2029)	$87.0 M/yr	$100.1 M/yr
Cost of Water (2029)	$7.95/kgal	$9.14/kgal

Cost Model: Impact to CCW Ratepayer

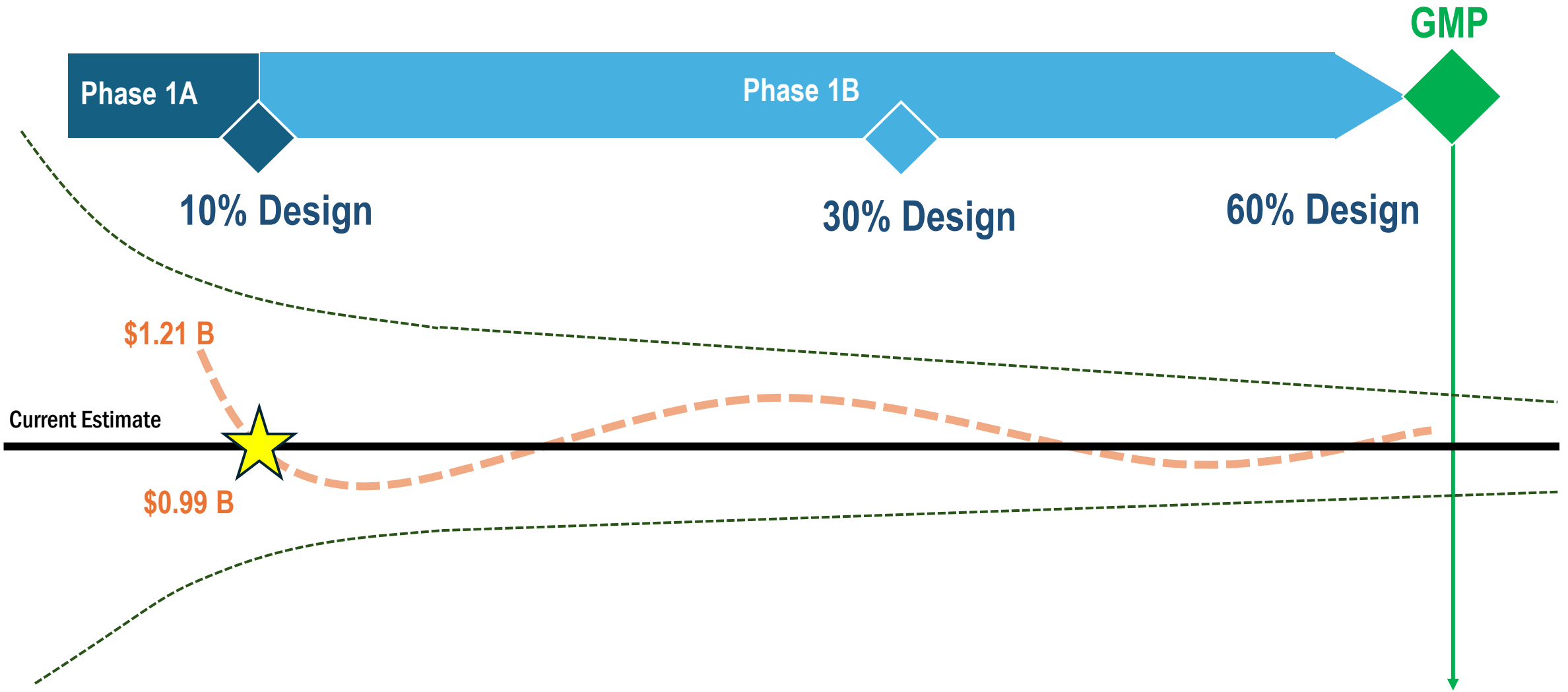
Impact to the CCW Ratepayer	Initial Budget $757M	10% Cost Model $1.189B	Cost Model + Grant**
Average Monthly Increase (Residential)*	$9.96	$11.38	$9.92
Average Monthly Increase (Commercial)	$181.00	$206.83	$180.12
Average Monthly Increase (Large Volume)	$405,040	$462,986	$403,215

Rates are forecasted for 2029, the year the full debt service and operation and maintenance cost will begin

* Residential average monthly increase is based on use of 6,000 gallon per month

** $180 million grant funding from the U.S. Bureau of Reclamation

Cost Model: Construction Cost Iteration



Cost Model: Project Cost Breakdown

Project Phase	Status	Estimated Cost
Project Administration, Technical Support and Construction Inspection Services (Owner's Advisor)	Ongoing	$35M
Phase 1A – Planning, Pilot Protocol, and Basis of Design	Complete	$10M
Phase 1B – Design, Early Works, and Guaranteed Maximum Price (GMP)	Ongoing	$95M
Phase 2 – Final Design and Engineering Services	Planned	$52M
Phase 2 - Construction	Planned	$997M
Total Project Cost		$1.189B

Planning, Design & Admin Services

Cost Model: Engineering Summary

Planning, Design and Administration Services		
Planning and Design Services	**Cost**	**Description**
Base Design Services	$ 62,773,580	Engineering for Final Design
Engineering Services During Construction	$ 44,315,420	Construction Detailing and Support
Vendor Engineering	$ 11,653,493	Supplier Design Submittals
Estimating	$ 4,680,000	Cost Model and GMP Estimating
Procurement	$ 1,170,000	Commercial Procurement Process
Constructability	$ 11,115,000	Value Engineering and Integration of Construction Plan
Management and Planning	$ 9,426,425	Project Management and Scheduling
Demonstration Plant	$ 12,000,000	Demonstration Plant Supply and Construction
Subtotal	**$ 157,133,918**	
Freese and Nichols Administration Services	$ 35,000,000	Design and construction technical support, contract support, and inspection services
Total	**$ 192,133,918**	

Cost Model: Construction Summary

	Phase 2 Construction Cost Summary	Cost	Description
1	**Marine Work**	**$ 151,493,815**	
	Intake Line	$ 69,757,035	Incoming Pipeline from Inner Harbor
	Discharge Line	$ 81,736,780	Discharge Pipeline to Inner Harbor
2	**Treatment Plant Labor and Construction Equipment**	**$ 582,271,072**	
	Civil	$ 45,830,149	Desal Earthwork, Paving, and Sitework
	Structural	$ 92,404,650	Desalination Plant Concrete and Steel
	Piping (Underground and Above Ground)	$ 118,242,391	Piping within the Desalination Plant
	Process Equipment	$ 154,130,011	Desal Processing Equipment
	Electrical and Instrumentation	$ 104,113,659	Desal Power and Controls
	Buildings	$ 67,550,212	Buildings and Equipment Enclosures
3	**Product Waterline**	**$ 69,962,876**	Product Pipeline from Desal to Navigation
4	**Navigation Pump Station Improvements**	**$ 24,705,495**	Storage Tank and Blending Equipment
5	**Escalation**	**$ 48,740,000**	Labor Equipment Materials Escalation
6	**Contingency**	**$ 45,000,000**	Unknowns
	Subtotal	**$ 922,173,258**	
7	**Bonds and Builders Risk Insurance**	**$ 9,020,551**	Bonds and Insurance
8	**General Conditions**	**$ 66,095,324**	Construction Management and Support Services
	Total Cost	**$ 997,289,133**	

Cost Model: Next Steps

- 30% Design Submittal and Cost Model Update
- 60% Design Submittal and Guaranteed Maximum Price
- Early Works Packages (Future Council Approved Amendments)
  - Utility Relocation/Demo — July 2025
  - Site Grading — October 2025
  - Underground Utilities — November 2025
  - Foundations/Pipeline — December 2025

Future Project Topics

Upcoming Briefings and Meeting:

- City Council Briefings
  - At least twice per month through 2025
  - Next briefing August 12, 2025

Upcoming Topics:

- Demonstration Plant Construction Status Update
- Design amendment planned for July 29 City Council

INNER HARBOR

WATER TREATMENT CAMPUS

Questions?