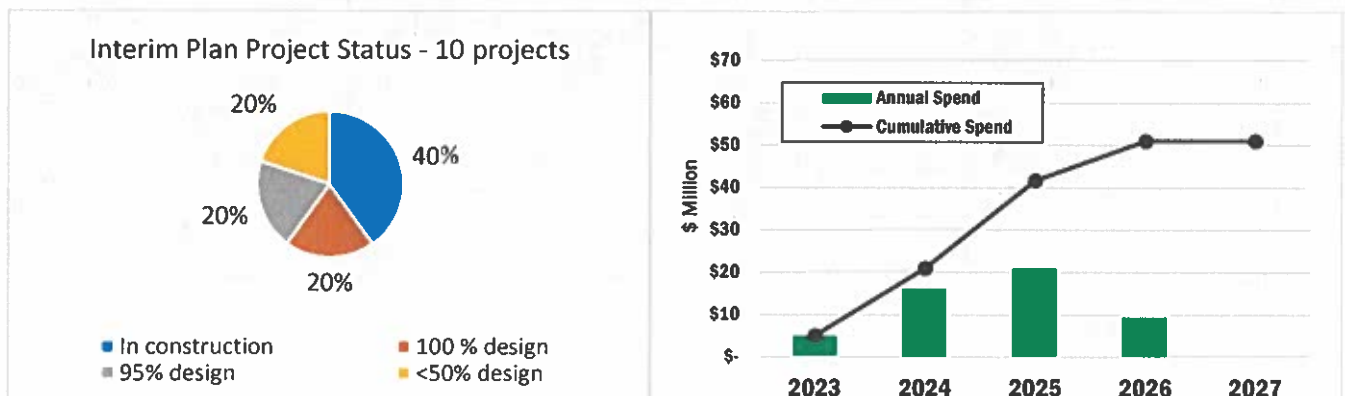


### PROGRAM PURPOSE

Reduce combined sewer overflows and improve water quality in the James River

### PROGRAM SCHEDULE – Interim Plan:

The Interim Plan contains 10 projects that will reduce CSO overflows by 182 million gallons. They are required to be complete by July 1, 2027. All 10 projects will meet the deadline.



### PROGRAM SCHEDULE - Final Plan (Approved with significant cost savings!):

- Final Plan contains 4 projects that will achieve the required bacteria reductions
- \$575 million cost of approved final plan is less than half of what was originally envisioned two years ago
- Gilles Creek storage tank and Almond Creek sewer separation already in design and funded by ARPA
- Shockoe high-rate disinfection project produces the majority of the water quality benefits
- City needs \$500 million in grant funding over the next four fiscal years to keep the Final Plan on track for 2035 completion

The HRD facility is the heavy lifter in bacteria reduction to the James River accounting for 90% of the improvement. It is the key driver in improving water quality in the James River. We anticipate having the disinfection project ready for bid/construction by 2029. In order to proceed past the design phase, the City will need to have a funding plan in place that does not adversely impact the ratepayers and citizens of the City.

Project	overflow volume reduced, MG	Estimated capital cost, \$M	\$/ gal reduced
High-Rate Disinfection at Shockoe retention basin	691	\$340	\$0.5
Canoe Run storage tank	83	\$160	\$1.9
Gillies Creek #1 storage tank *	4	\$30	\$2,700
Hilton Street #1 (Sewer Separation in Almond Creek CSS area) *	7	\$35	\$660
<b>Total:</b>	<b>785 MG</b>	<b>\$565*</b>	<b>\$0.7</b>

\* These projects are already underway utilizing ARPA funding.

**City of Richmond Combined Sewer System Update  
September 2024**



DEPARTMENT OF  
**PUBLIC  
UTILITIES**



\* This estimate is at mid-point of construction.

\* **Green Infrastructure implementation for \$10M brings the Final Plan total to \$575 million.**

**Projected Final Plan Spending Schedule**

Calendar Year	Shockoe Disinfection	Canoe Run Storage Tank	Gillies Creek #1 (ARPA Funded)	Hilton Street # 1 (ARPA Funded)	Total	Cumulative Total
2023	\$0.00	\$0.00	\$78,000.00	\$5,000.00	\$83,000.00	\$83,000.00
2024	\$0.00	\$0.00	\$651,780.00	\$479,250.00	\$1,131,030.00	\$1,214,030.00
2025	\$565,000.00	\$452,000.00	\$11,300,000.00	\$13,560,000.00	\$25,877,000.00	\$27,091,030.00
2026	\$5,377,500.00	\$5,258,000.00	\$17,327,500.00	\$20,076,000.00	\$48,039,000.00	\$75,130,030.00
2027	\$11,340,000.00	\$8,316,000.00	\$642,720.00	\$879,750.00	\$21,178,470.00	\$96,308,500.00
2028	\$11,925,000.00	\$927,500.00	\$0.00	\$0.00	\$12,852,500.00	\$109,161,000.00
2029	\$2,432,500.00	\$30,580,000.00	\$0.00	\$0.00	\$33,012,500.00	\$142,173,500.00
2030	\$65,475,000.00	\$64,020,000.00	\$0.00	\$0.00	\$129,495,000.00	\$271,668,500.00
2031	\$102,600,000.00	\$48,488,000.00	\$0.00	\$0.00	\$151,088,000.00	\$422,756,500.00
2032	\$106,987,500.00	\$1,958,500.00	\$0.00	\$0.00	\$108,946,000.00	\$531,702,500.00
2033	\$33,297,500.00	\$0.00	\$0.00	\$0.00	\$33,297,500.00	\$565,000,000.00
2034	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$565,000,000.00
2035	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$565,000,000.00
<b>TOTAL</b>	<b>\$340,000,000.00</b>	<b>\$160,000,000.00</b>	<b>\$30,000,000.00</b>	<b>\$35,000,000.00</b>	<b>\$565,000,000.00</b>	
<b>Legend:</b>	Design & Permitting	Construction				

In order to meet the deadlines in SB1064, the City would need to secure construction contracts for the Final Plan no later than 2029. Total funding in State grants necessary to complete the Final Plan is \$500M. The funding timeline could look as follows:

Time/FY Year	Amount	Purpose
FY 2025 or July 1, 2025	Amend \$50 to \$150M	Preliminary Engineering, fund set aside
FY 2026 or July 1, 2026	\$150 M	Engineering, Geotech, Permitting, fund set aside
FY 2027 or July 1, 2027	\$100 M	Fund Set aside – Construction/design
FY 2028 or July 1, 2028	\$100 M	Fund Set aside – construction/design
<b>TOTAL:</b>	<b>\$500 M</b>	

**Interim Plan projects:**

To date the City has been awarded \$150M in ARPA funding requiring an additional \$50 million City match. The total amount spent to date is \$69.7M (includes City match spending of \$47.0M).

**SUMMARY:**

- ❖ The Interim Plan is on schedule with 80% of the projects in construction by the end of 2024.
- ❖ Spending of the ARPA grant will increase through the remainder of 2024 and 2025.
- ❖ The Final Plan was approved by DEQ in August 2024.
- ❖ To build the High-Rate Disinfection Facility at Shockoe Retention Basin the City will need substantial additional grant funding set aside by 2029.