

# Public Stakeholder Group Meeting #2

Thursday, July 28, 2022



# Agenda

- Setting Ground Rules Together
- How Combined Sewer Systems (CSS) Function
- How We've Addressed Richmond's CSS So Far
- Senate Bill 1064
  - Interim Plan
  - Final Plan
    - The Part You Play



# Welcome!

Member	Council District
Michael Regulinski	1
Sarah Weisiger	
Jeremy Hoffman, PhD	2
Leighton Powell	
TBD by September!	3
Stephanie Miller	
Maria Dougherty	4
Will Chapman	
Charles Ware	5
Laney Sullivan	
Allison Davis	6
Peace Bowles	
Marie Stella	7
Steven Helm	
Amelia Lightner	8
Reverend Dana Sally-Allen	
William Nickerson	9
Linda Owen	



# Welcome, DEQ!



- Azra Bilalagic
- Joy Abel
- Frank Lupino



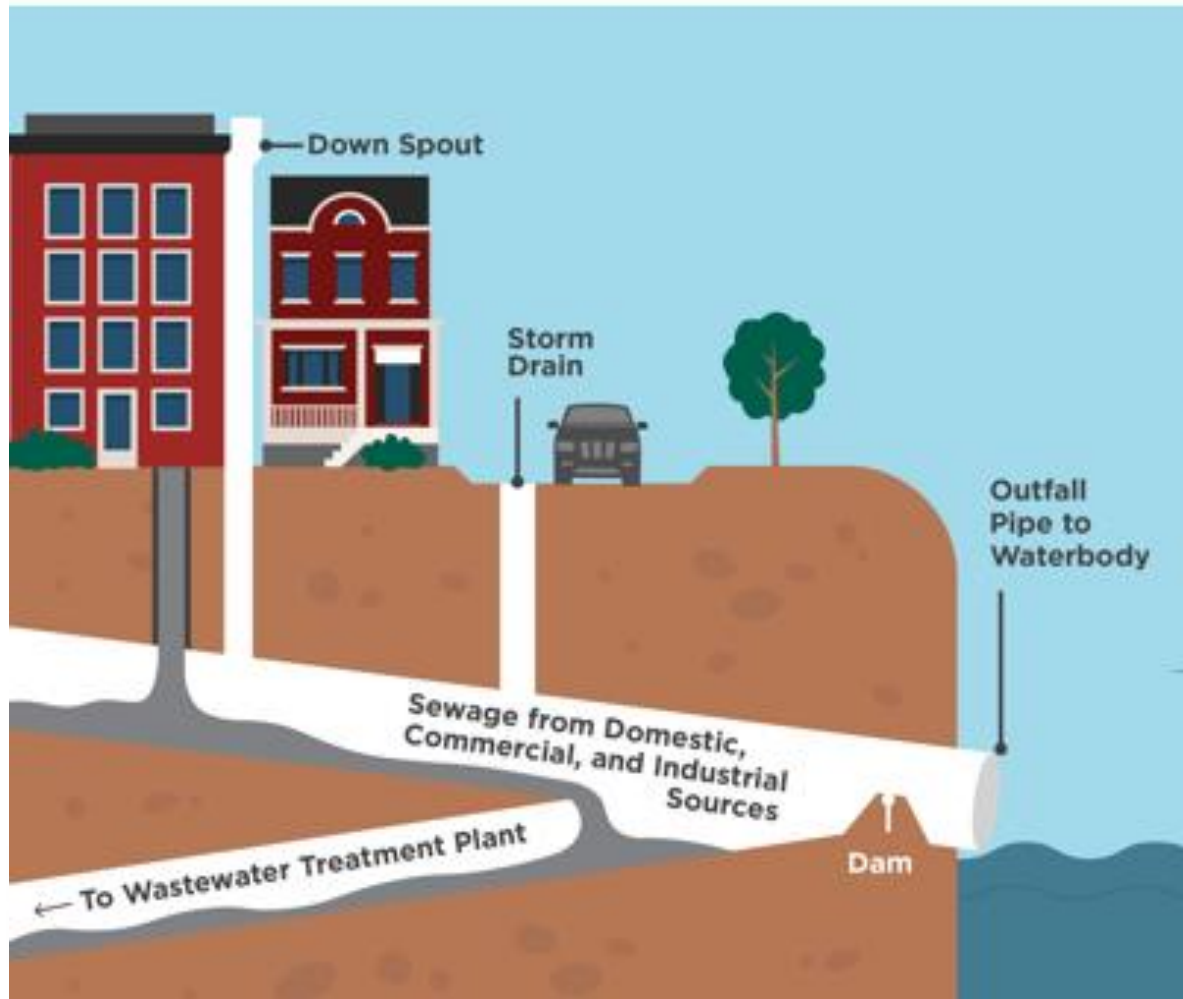
# Ground Rules

- Be respectful of others
- Be present and focused during meetings
- Be additive, not repetitive, during discussions
- Everyone should participate and no one should dominate
- Be clear when you're speaking if you're sharing your own thoughts or input provided by those you represent
- There are no stupid questions! Ask!
- Be open to new ideas
- Don't talk over people or interrupt
- Moderator will make note of group members who raise their hands to speak; or, wait to speak
- If there are 7 seconds of silence, we can move on from a discussion topic

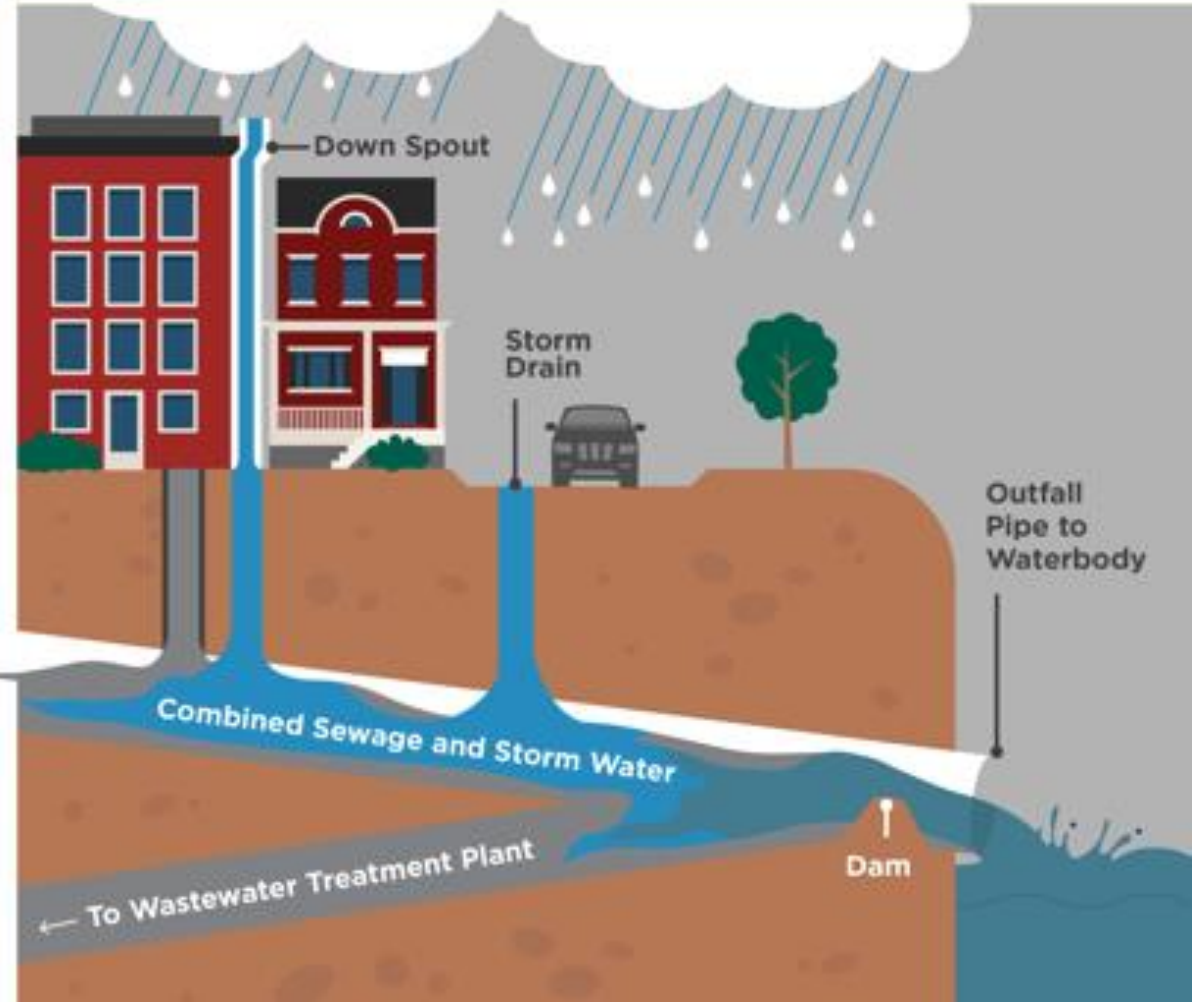


# What is a Combined Sewer System (CSS)?

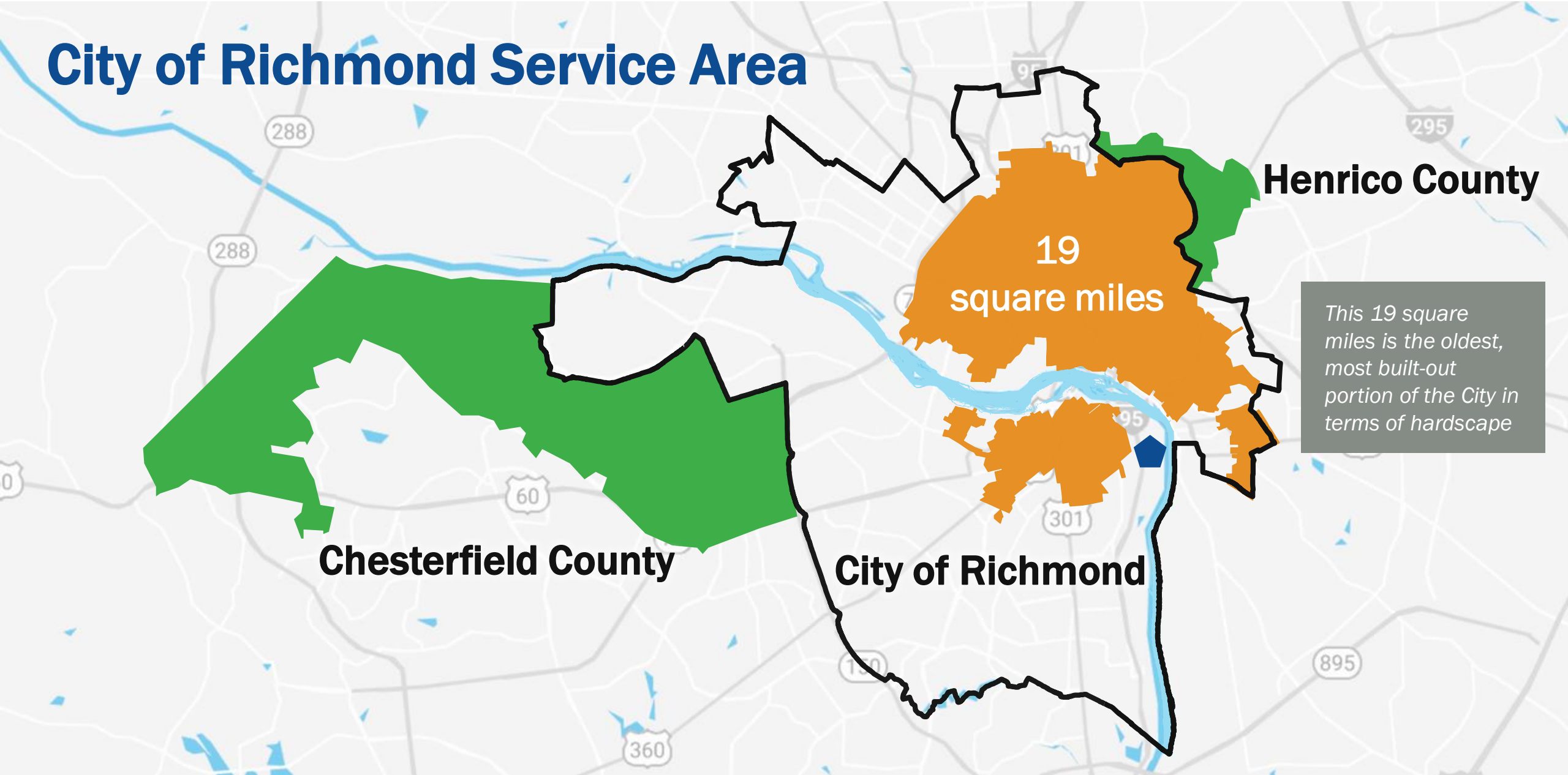
## Dry Weather



## Wet Weather



# City of Richmond Service Area



Combined Sewer System  
Drainage Area



County Area  
Serviced by City

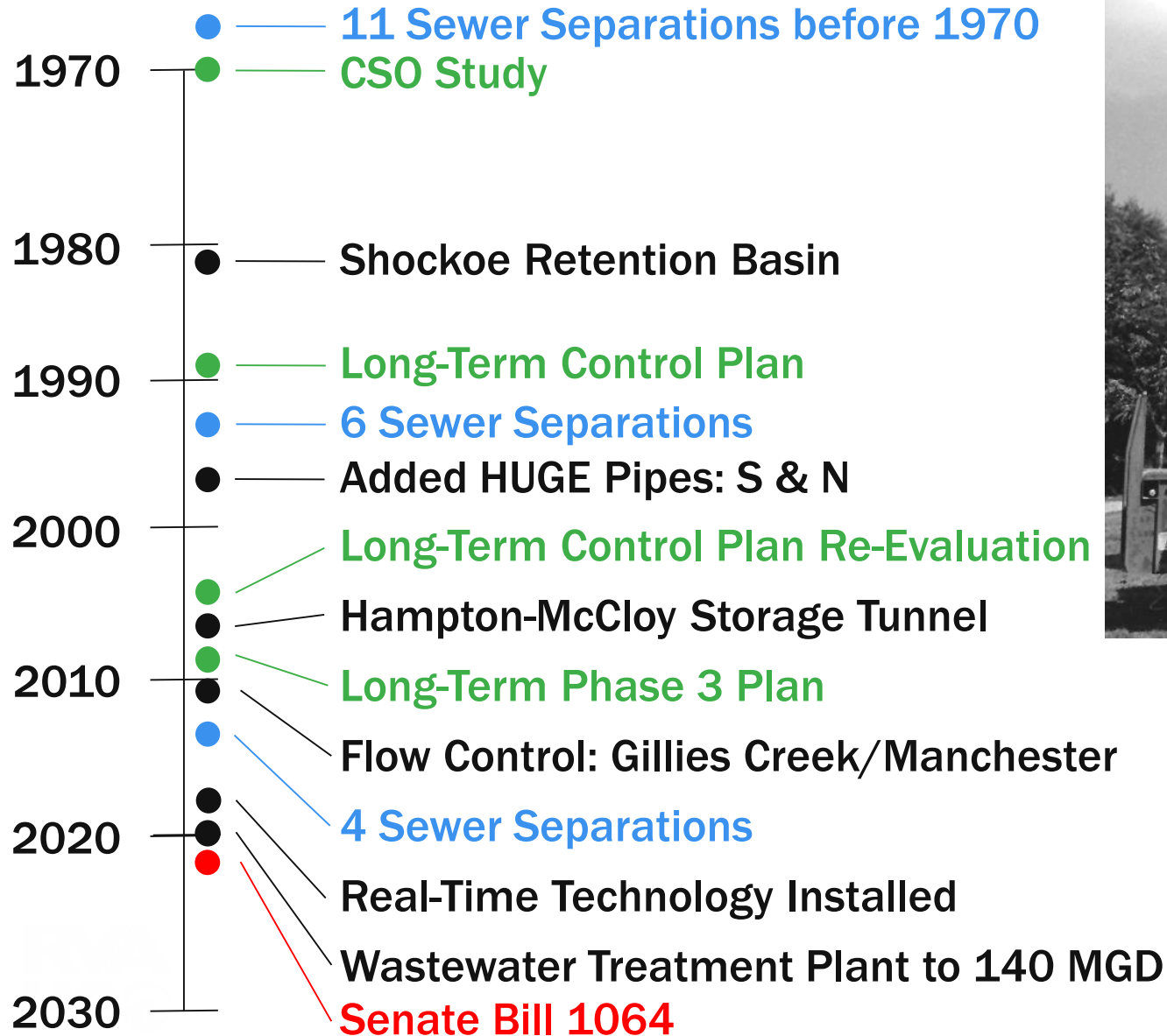


Wastewater  
Treatment Plant

# Richmond's Combined Sewer System StoryMap



# What We've Done So Far



- Planning
- Sewer Separation
- Storage and Treatment
- Legislation

# CSS Improvements

## Phase 1 (1970 – 1988)

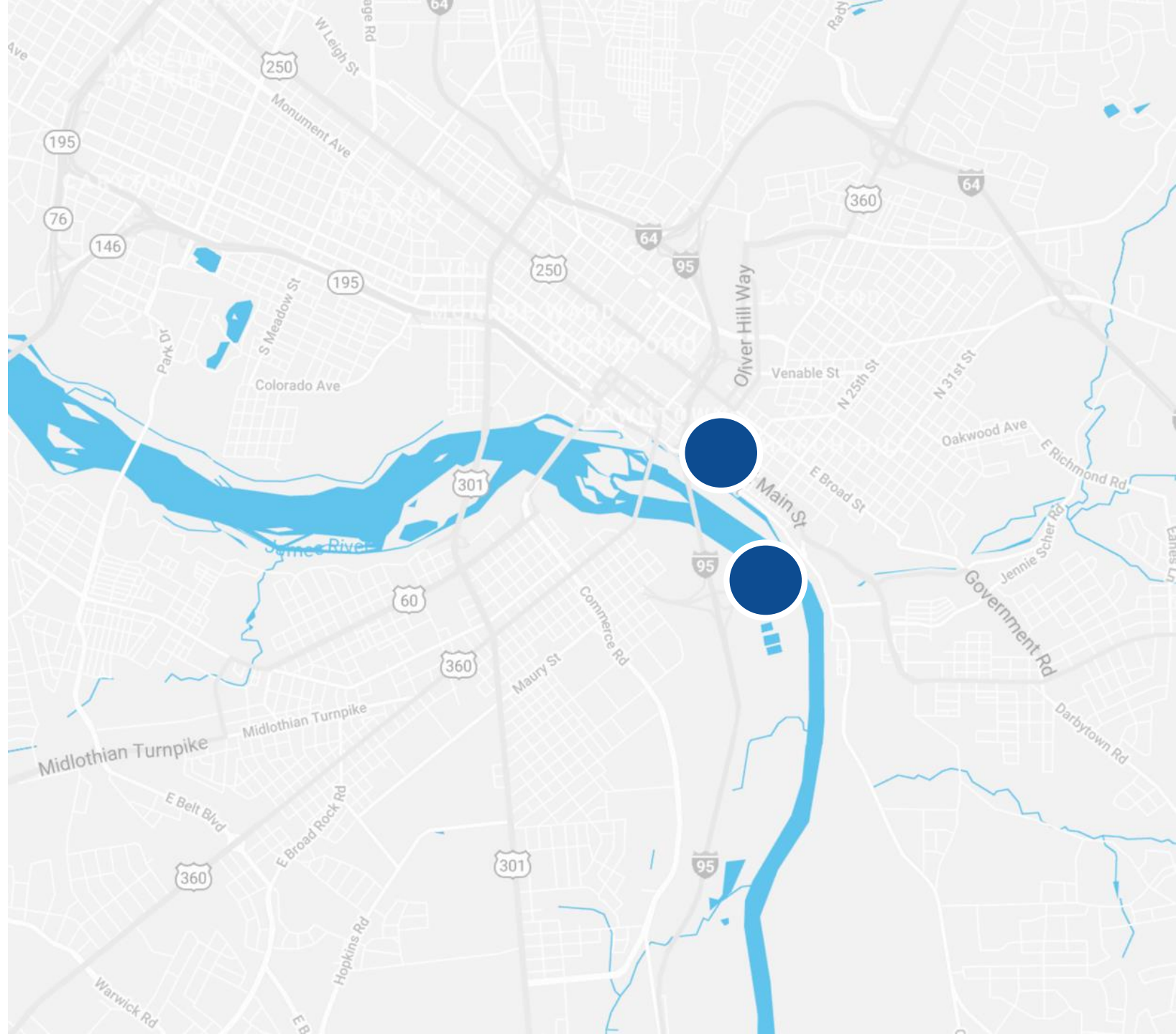
### 2 Projects

50 MG Shockoe Retention Basin  
WWTP capacity expansion to  
75 MGD during wet weather  
(11 sewer separations before 1970)

### 80% CSO Capture

Estimated annual basis

**\$117M**



# CSS Improvements

## Phase 2 (1988 – 2002)

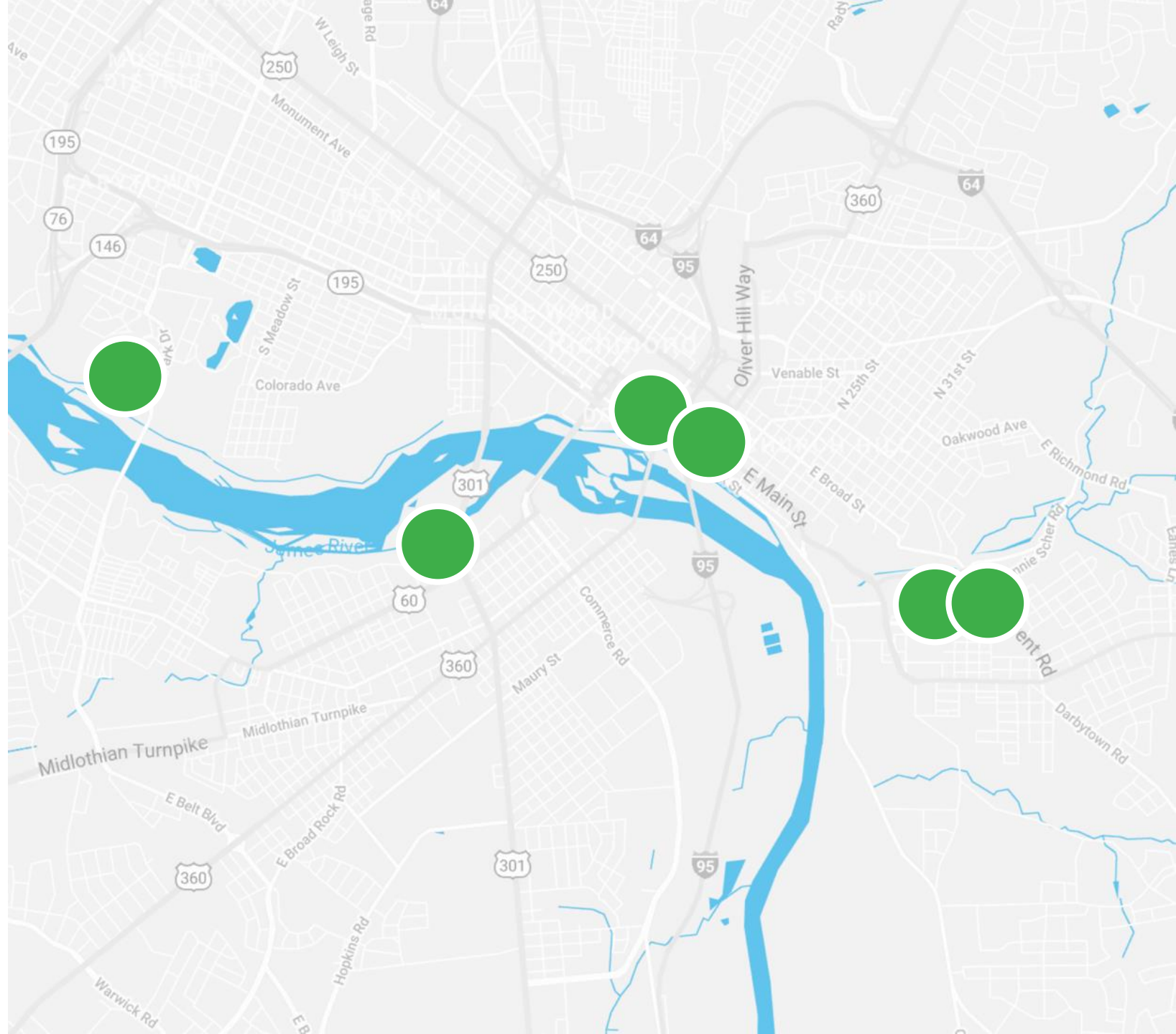
### 6 Projects

Conveyance sewers  
7 MG Hampton-McCloy tunnel  
6 sewer separations

### 85% CSO Capture

Estimated annual basis

**\$127M**



# CSS Improvements

## Phase 3 (2002 – present)

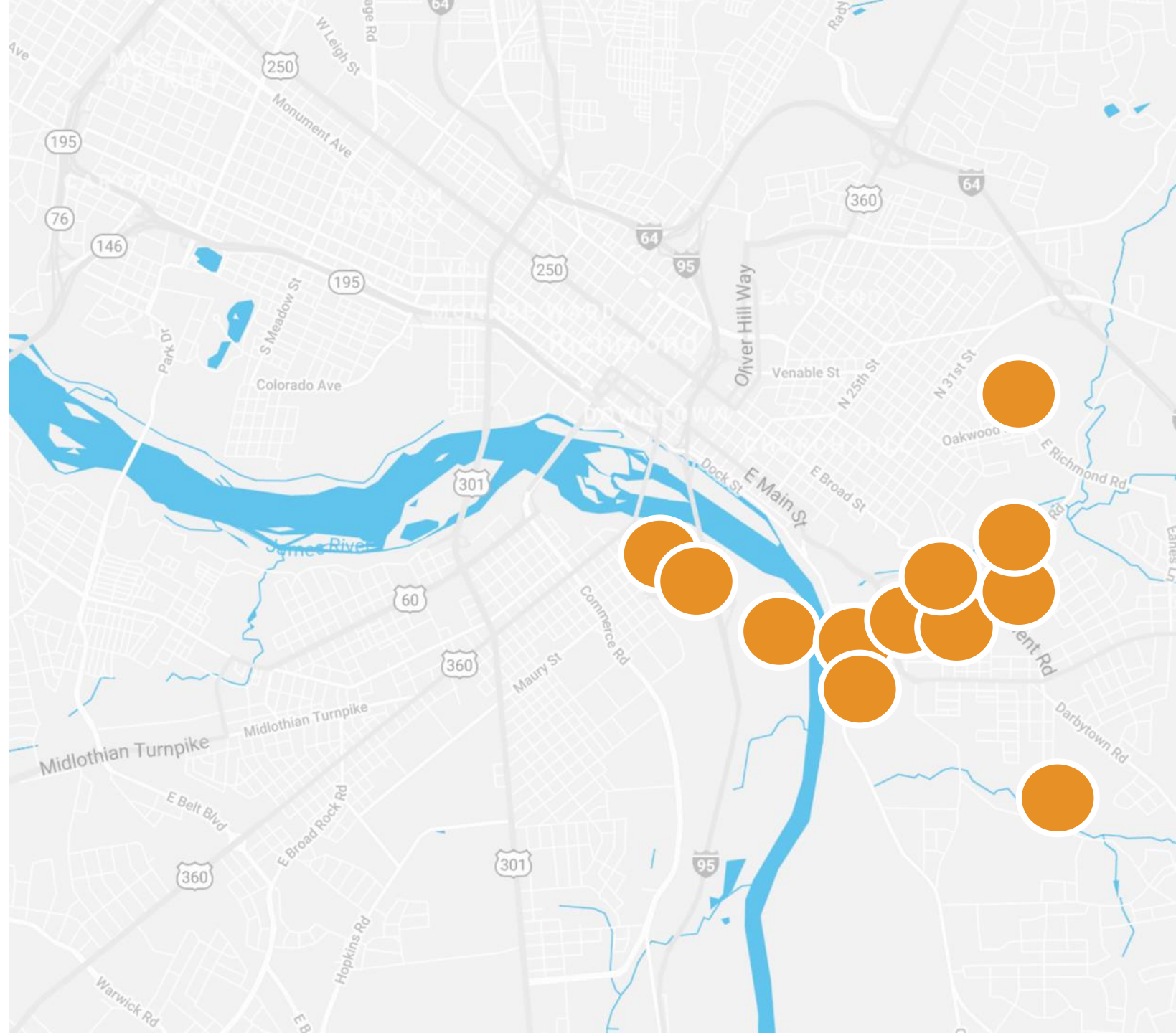
### 12 Projects

Nutrient upgrade at WWTP  
WWTP capacity expansion to  
140 MGD during wet weather  
4 sewer separations

### 91% CSO Capture

Estimated annual basis

**\$188M**



# Senate Bill 1064



## VIRGINIA ACTS OF ASSEMBLY -- 2020 SESSION

### CHAPTER 634

*An Act to direct compliance with regulations of certain combined sewer overflow outfalls; James River watershed.*

[S 1064]

Approved April 2, 2020

#### **Be it enacted by the General Assembly of Virginia:**

**1. § 1.** *That the owner or operator of any combined sewer overflow (CSO) system east of Charlottesville that discharges into the James River watershed shall submit to the Department of Environmental Quality (the Department) the following:*

*A. By July 1, 2021, an interim plan detailing all known actions the owner or operator can initiate by July 1, 2022, to address the requirements of any consent special order issued by the State Water Control Board (the Board) to the owner or operator regarding the CSO system; and*

*B. By July 1, 2024, a final plan updating the interim plan and detailing all actions the owner or operator will take to satisfy all requirements of any consent special order issued by the Board to the owner or operator regarding the CSO system.*

*Both the interim plan and the final plan shall be divided into discrete projects or phases that may be planned or constructed individually or in combination and shall include for each project or phase (i) an estimated timeline from the start of detailed planning to completion of construction, (ii) an estimated cost, (iii) the projected resultant water quality improvements, and (iv) proposed funding sources. The owner or operator, subject to Department approval, may substitute for any proposed action in either the interim or final plan an alternative action or actions to address the requirements of any consent special order issued by the Board to the owner or operator regarding the CSO system, provided that such alternative is at least as cost-effective as the original proposed action. The Department shall assist the owner or operator in developing both the interim plan and the final plan and in identifying available sources of funding and financing.*

**§ 2.** *Any such owner or operator of a CSO system shall:*

*A. By July 1, 2022, initiate construction and related activities pursuant to the interim plan required in subsection A of § 1;*

*B. By July 1, 2025, initiate construction and related activities pursuant to the final plan required in subsection B of § 1;*

*C. By July 1, 2027, complete construction and related activities pursuant to the interim plan required in subsection A of § 1;*

*D. By July 1, 2030, identify any additional action that is applicable to the owner or operator of a CSO system and is necessary to meet, by 2036, the requirements of the total maximum daily load (TMDL) for bacterial impairments of the James River and its tributaries in the Richmond area, as described in the implementation plan for such TMDL issued by the Department in 2011; and*

*E. By July 1, 2035, complete construction and related activities pursuant to the final plan required in subsection B of § 1.*



# Senate Bill 1064 Requirements

**The City of Richmond is required to develop Interim and Final Plans:**

- ☒ **Interim Plan submitted July 2021**; construction to be completed by July 1, 2027
- ☐ **Final Plan due July 2024**; construction to be completed by July 1, 2035



# Interim Plan Projects

## 10 Projects

Reduce overflows by **maximizing and using existing capacity**

Estimated 182.3 MG capture

## 92% CSO Capture

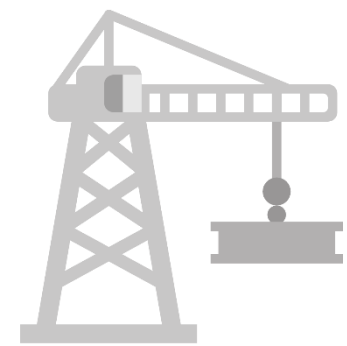
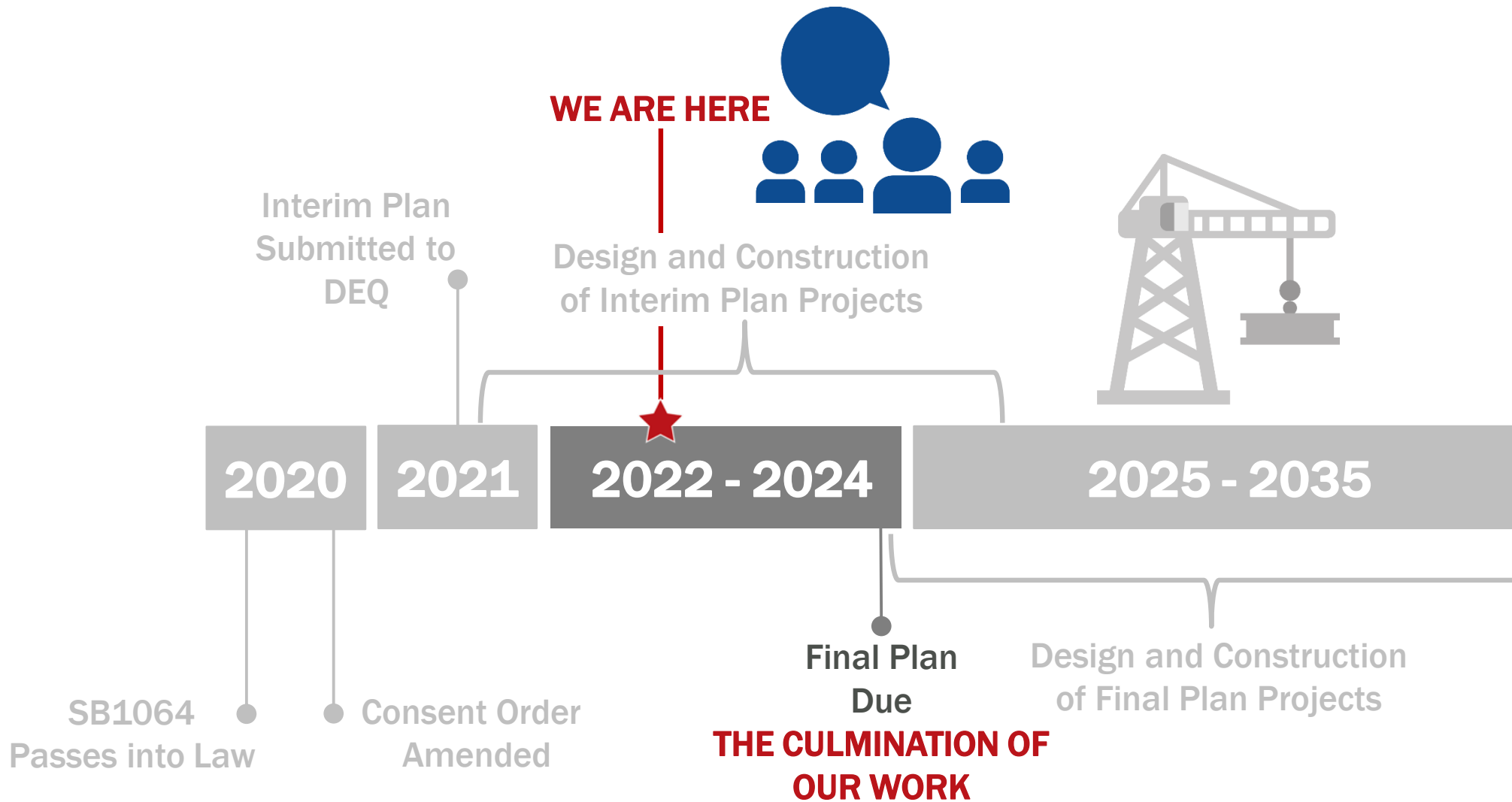
Estimated annual basis

**\$33.1M**

**July 1, 2027**

**Construction Deadline**





# The Final Plan

Must capture, convey, and treat up to 5 billion gallons per year

99% CSO Capture

Estimated annual basis

\$1.3B\*

July 1, 2035

Construction Deadline



# The Part You Play

- Review and monitor the development of the Final Plan
- Provide input and insight from your communities
- Share progress with your communities



**NEXT MEETING**  
**SEPTEMBER 29**



[Grace.LeRose@rva.gov](mailto:Grace.LeRose@rva.gov)