



Water Revitalization Plan

Stakeholder Advisory Group

Cohort 2 | Meeting #4

April 29th, 2026



Disclosure Statement

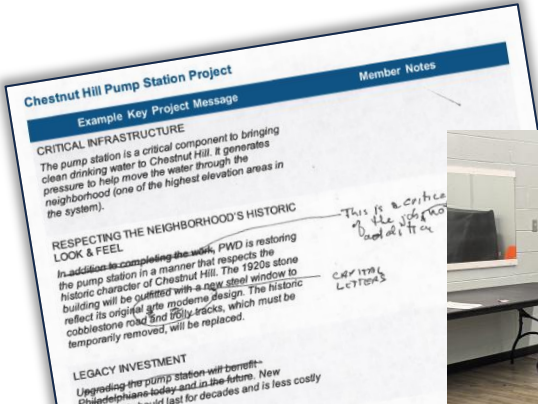
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- This meeting is being audio recorded to accurately capture meeting minutes.



October 2025 Recap

What you shared:

- ◆ Simplified and snappy top project messages for our three upcoming pump station projects
- ◆ Recommendation to use analogies when talking about the need to upgrade aging infrastructure
- ◆ Recommendation that cost or rate savings conversations should include specifics



Breakout Groups



Aging Infrastructure

Many of the country's water systems were built decades ago. Aging water infrastructure across the U.S. (and in Philly!) needs upgrading or replacing.

Aging infrastructure is:

- Less efficient and more expensive to operate
- More likely to require emergency repairs
- Ill-prepared to address today's demands (new regulations, climate change, etc.)

Drinking Water
The nation's water infrastructure is aging and underfunded. More than 9 million existing lead service lines pose health concerns, and in 2023, the Environmental Protection Agency (EPA) determined that the nation's water infrastructure needs stand at \$625 billion over 20 years. That exceeds EPA's 2018 assessment by more than \$150 billion. The 2021 Infrastructure Investment and Jobs Act (IIJA) invested more than \$20 billion for drinking water infrastructure.

2025 REPORT CARD FOR AMERICA'S INFRASTRUCTURE

America's aging water infrastructure faces new threats
Challenges to infrastructure... and the increasingly severe effects of extreme weather. Many drinking water utilities are actively improving water infrastructure through innovations such as asset failure prediction technologies, which improve the ability to identify issues before they become failures. Unfortunately, only about 30% of utilities have fully implemented an asset management... and programs are still identifying and replacing dangerous systems of small com...

The U.S. urgently needs to increase funding to shore up facilities, experts say, as climate change and emerging contaminants like PFAS pose growing threats.

The EPA estimates that the nation's water infrastructure needs \$625 billion in investments over the next 20 years.



We missed you in January...

How does extreme cold impact PWD operations?



Breaking down ice to keep drinking water flowing – icy conditions make it harder to intake water from the rivers for treatment



Managing an influx of water main breaks (in the snow!)



Today's Agenda



Welcome



Community
Share Out



WRP Deep Dive:
Redundancy

Guest speaker: Brendan Reilly



Redundancy
Scenarios



Wrap Up



Today's Key Learning Outcomes

- Understand the importance of redundancy and how redundant systems protect Philadelphia's drinking water system
- Increase overall group member confidence communicating to friends/neighbors about redundancy, what it is, and why it is important



Welcome Brendan....

- Assistant Deputy Commissioner of Field Operations
 - Water Conveyance System
 - Wastewater Collection System
 - Operations Administration
 - 879 filled positions of 1,090
- Since 2015 Brendan has managed the water side of Field Operations which includes transmission mains, storage facilities, pump stations, and operation of the entire water system
- Started with the PWD in June 2002 two-weeks after graduating from Widener University
 - 23 years of operational experience





Community Share Out

- What did you hear from your community?

Community Share Out

Thanks for helping us spread the word about the WRP!

What have you heard?

- Questions about the WRP?
- Concerns about how the extreme cold and drinking water service?





Redundancy and the WRP

- The four primary benefits of the WRP
- How redundancy makes our system more resilient
- WRP projects highlight
- Guest speaker: Brendan

Major benefits of the WRP...

Building reliable infrastructure today for a resilient tomorrow



Improving water quality



Updating aging infrastructure



Sequencing projects to reduce costs



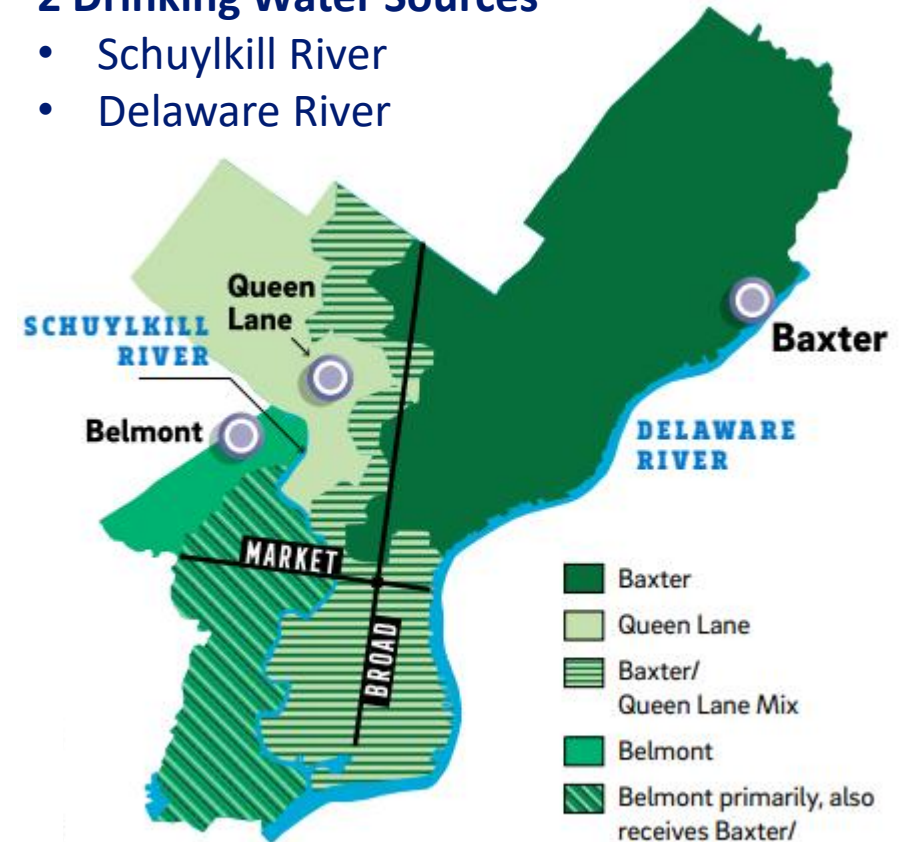
Maintaining reliable water access

A more **resilient** drinking water system through **redundancy**

Redundancy: Having **extra parts, systems, or pathways** within our water infrastructure to maintain reliable drinking water access.

2 Drinking Water Sources

- Schuylkill River
- Delaware River



*typical operating conditions

Resiliency vs Redundancy

Redundancy is the forethought to keep a spare tire in the trunk of your car.

Resiliency is having the necessary skillset to change the tire if you need to.



Redundancy in everyday life



Approved sign-out list
for daycare pickup



Trolley closures... how
can I get to work?



Don't forget your extra
water bottle!

*Can you think of additional instances
of **redundancy** in your daily life?*



Redundancy is **essential** for a **resilient** drinking water system



Protects critical systems when things don't go as planned (prevents emergencies)

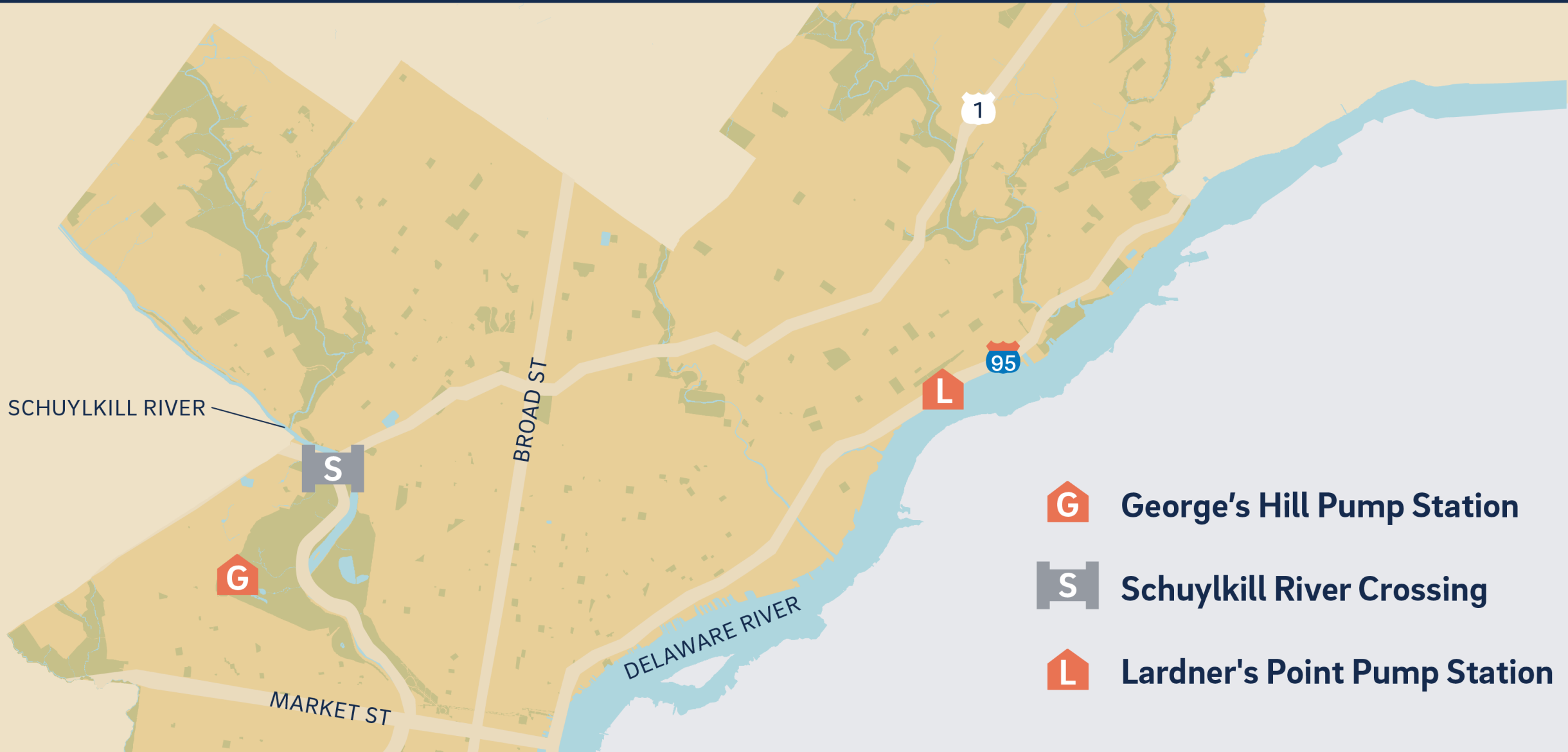


Allows for maintenance without disrupting the system or needing to turn things off



Extends the lifespan of high-use components (like pumps) by reducing wear

Three WRP Redundancy Projects on the Horizon



A second pump station for West Philly...

- These four neighborhoods in West Philly are currently served by a single pump station
- Adding a second pump station will create **redundancy** by adding multiple ways to generate the pressure necessary to deliver drinking water to these neighborhoods



Rendering of the future pump station

Neighborhoods Served:

- Wynnefield Heights
- Overbrook Farms
- Overbrook Park
- Carroll Park

Replacing an aging pump station...

- Pump station is over 100 years old with only minor renovations since the 1960s!
- Project adds new, **redundant** equipment:
 - A new supply connection
 - Additional pumps
- Pumps will be able to operate independently, making it easier to switch between redundant supplies
- Project also includes new yard piping and transmission mains, and the development of a green stormwater operations facility
- Upgrades will improve water pressure, efficiency, and better manage stormwater

The pump station in 1930



Neighborhoods Served:

- Northeast Philly



Rendering of the future pump station

Image Source: The Historical Society Of Tacony

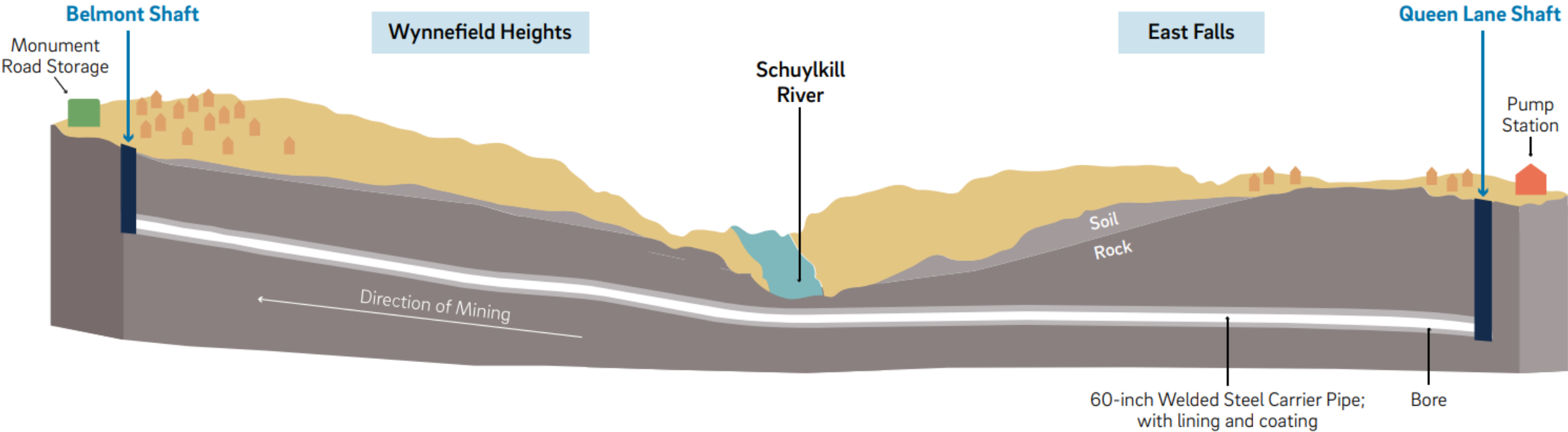
Key WRP Project: A tunnel to connect two water treatment plants

- The **Schuylkill River Crossing (SRX)** is a large-scale tunnel project that will connect two of the city's drinking water plants
- SRX project will install a 60-inch diameter transmission main in an underground tunnel crossing the Schuylkill River.



SRX Project Overview

Current Phase: **Design**

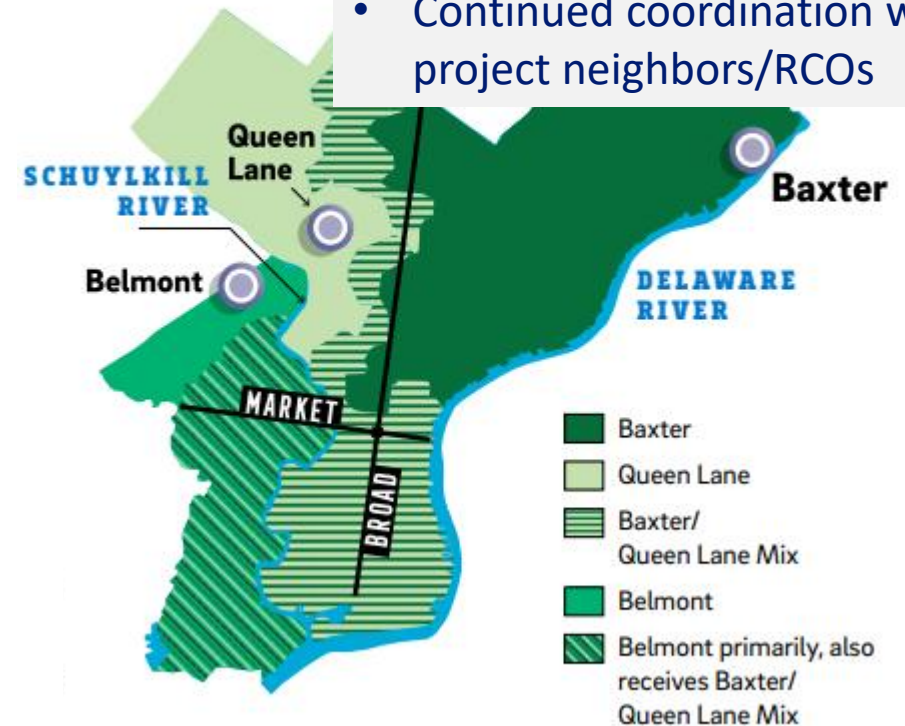


How does a new tunnel add redundancy?

- Belmont and Queen Lane Treatment Plants are not currently connected.
- New pipe will add **redundancy** by allowing us to draw enough water **exclusively** from one river to serve the entire city in the event of an emergency.
- This redundancy will make the system more **resilient**:
 - Philadelphia can be supplied from either river for extended periods
 - Ensures reliable water service during extended emergencies.
- This project also allows us to move forward with other WRP projects

What's next for SRX in 2026?

- Launching early project design
- Site prep work
- Continued coordination with project neighbors/RCOs





Redundancy Scenarios

- Group activity/discussion

Let's discuss...

How will increasing redundancy in our water system protect the Philadelphians it serves?

We've got some examples ready.

Let's discuss...

- For Brendan:
 - How could this scenario impact Philadelphians?
 - How could redundancy in our drinking water system improve the outcome of this scenario?
- For the Stakeholder Advisory Group:
 - Could you use this scenario to explain why redundancy is necessary in our drinking water system?



Wrap Up

- Rate hearings & more upcoming PWD events
- Ahead of our next meeting

Upcoming Events: Rate Hearings & Utility Resource Fair

Water Assistance Programs & Rates Hearings

- **May 7** (Public Hearing)
- **May 14** (Technical hearing Pt. 1)
- **May 15** (Technical hearing Pt. 2, if needed)



You can submit comments, or attend a hearing. Learn more:

www.phila.gov/water-rate-meeting

Utility Resource Fair

- **May 16**
- Location: 5201 Haverford Avenue, 19139
- Connecting resources across utilities/assistance with support programs.



More upcoming PWD events

- **Saturday, June 6: 10:00am – 2:00pm:**
PWD Water Treatment Plant Open House
 - Stakeholder Advisory Group Table
 - Location: Belmont Water Treatment Plant
4300 Ford Road, 19131
- **Saturday, October 17:**
PWD Open House
 - More info available at July SAG Meeting



Volunteers needed to showcase our Stakeholder Advisory Group. **Add your name to the sign-up sheet!**



Ahead of Our Next Meeting

Redundancy Elevator Pitch:

Using what we talked about today, think about how you would explain the concept of water system redundancy to a neighbor.

Develop a 1-3 sentence description you would use to explain the concept.

Be prepared to share:

- 💧 Your redundancy "elevator pitch"
- 💧 If you shared it with anyone and their reaction/questions

Thank you!

water.phila.gov/revitalization

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*< SCAN for this month's
post-meeting survey*

