

Executive Director Report by Jim Mueller
September 28, 2022
Board Meeting

1) Operational Issues

The Little Falls Water Plant Fiber Optic Topology is being reconfigured to mitigate single point failure modes. During the Little Falls Water Treatment Plant shutdown on September 21, 2022 IT Dept. upgraded 4 twenty years old switches with new and more capable SCADA switches.

PVWC's contractor, Siemens, has started the second round of the inspection, testing, calibration, and maintenance of the electrical systems at the Little Falls site. This work will be performed under the renewal of their original contract.

PVWC began receiving wide-spread complaints of discolored water in Zones 1-4 in Clifton starting on August 26, 2022. On September 2, 2022 we started re-flushing Zones 1-4 on a 24 hours a day /7 days a week basis. It was determined the discolored water was due to extensive local construction in this concentrated area and contractors accessing local hydrants without authorization since no other PVWC activities were occurring in the vicinity. The presentation given to the Clifton City Council is attached to this Executive Director report to provide more details on the underlying distribution issues and short-term/long-term plans to address.

2) Organizational Highlights – Succession Planning

The Director positions approved by the Board in February and March 2022 are all posted with the current status provided in the table below.

| Position | Status |
|---|---|
| Director, Organizational Development and Human Resources (ODHR) | The top candidate, Otto Garcia started July 5, 2022. |
| Director, Laboratory and Water Quality (LWQ) | The top candidate Jennifer Loudon started August 1, 2022. |
| Director, Environmental Health and Safety (EHS) | The top candidate, Brandon Fuld , started September 6, 2022. |
| Director, Information Technology (IT) | The top candidate, Landy Ducheine , started September 6, 2022. |
| Director, Communications and Intergovernmental Coordination (CIC) | Search process is ongoing. |

As part of the succession planning process I will continue to work with Department Heads to identify key assistant roles to create a deep bench of talent that can be developed over time to make PVWC more robust and address current organizational gaps. Key departments identified to date requiring an infusion of qualified staff include: Laboratory; Engineering; Customer Service (particularly bi-lingual skills); Information Technology and Distribution.

3) Regulatory Issues

EPA's Health Advisories for PFOA, PFOS, GenX Chemicals, and PFBS

Post Brook System:

The PVWC temporary treatment system to remove PFOS was commissioned and put into service on August 16, 2022. The temporary treatment system is working and successfully removing PFOS. Initial

lab testing shows a PFOS result of 34 ppt (parts per trillion) before treatment (greater than the MCL of 13 ppt). The PFOS result after treatment is less than 1.9 ppt which is below the MCL of 13 ppt.

We are currently designing a permanent treatment system to treat PFOS for the Post Brook system, which is anticipated to be operational in 2025.

Little Falls Water Treatment Plant:

Based on new data and EPA's draft analyses, the levels at which negative health effects could occur are much lower than previously understood when EPA issued the 2016 health advisories for PFOA and PFOS – including near zero for certain health effects.

The Executive Director and operational and lab staff met and reviewed data on these chemicals in terms of existing treatment performance. Additional coordination meetings were held with other NJ water providers to discuss implications and strategies. The preliminary conclusion from the data review and discussions are that meeting any future limits based on the proposed health advisories would require major treatment upgrades. We are continuing to track the issue and work with other providers and professional organizations like AWWA to strategize on solutions.

We are currently developing a pilot program to test various technologies for efficacy at removing these forever chemicals and will look to engage other organizations and utilities for peer review opportunities.

4) Delinquent Accounts

The shutoff moratorium was lifted on March 15, 2022 and since that time PVWC has signed on as part of the Low Income Household Water Assistance Program (status details are provided in the section below). PVWC has developed a shut-off strategy targeting non-residential accounts first since the LIHWAP program is just rolling out. We are working with the owner cities on messaging to the non-residential entities in regards to starting shut-offs. Since the moratorium has been lifted 161 payment plans have been entered into totaling over \$340,000.

We began shutoffs of commercial accounts on 8/22/22. Through 9/2/22 we collected \$132,600 from delinquent accounts either through full payment or agreement to payment plans. Due to discolored water issues in several zones in Clifton from 8/26/22 to 9/12/22, Distribution staff were diverted from shutoffs to hydrant flushing. We will revisit the deployment of resources over the next few weeks to determine if more resources can be diverted to shutoffs to facilitate bill payments.

5) Low Income Household Water Assistance Program (LIHWAP)

We have been communicating regularly with the NJ Department of Community Affairs and to date they have provided \$22,057 of payments for 36 customers. We will continue to work with the State and get the word out locally about this opportunity.

6) Communications and Intergovernmental Coordination

- a) A press conference for the LIHWAP program was held in the Little Falls auditorium on Tuesday August 30th with Senator Nellie Pou; Assemblyman Gary Schaer; Assemblyman Benjie Wimberley; Paterson Mayor Andre Sayegh; Prospect Park Council President Shah; and Commissioners Ruby Cotton, Joe Kolodziej; and Carmen Depadua.
- b) We continue to communicate with the communities regarding the lifting of the shut-off moratorium including notes on monthly and quarterly bills, notes on delinquent notices, postcards sent to all postal patrons, bill stuffers and website/social media communications.



**Passaic Valley
Water Commission**

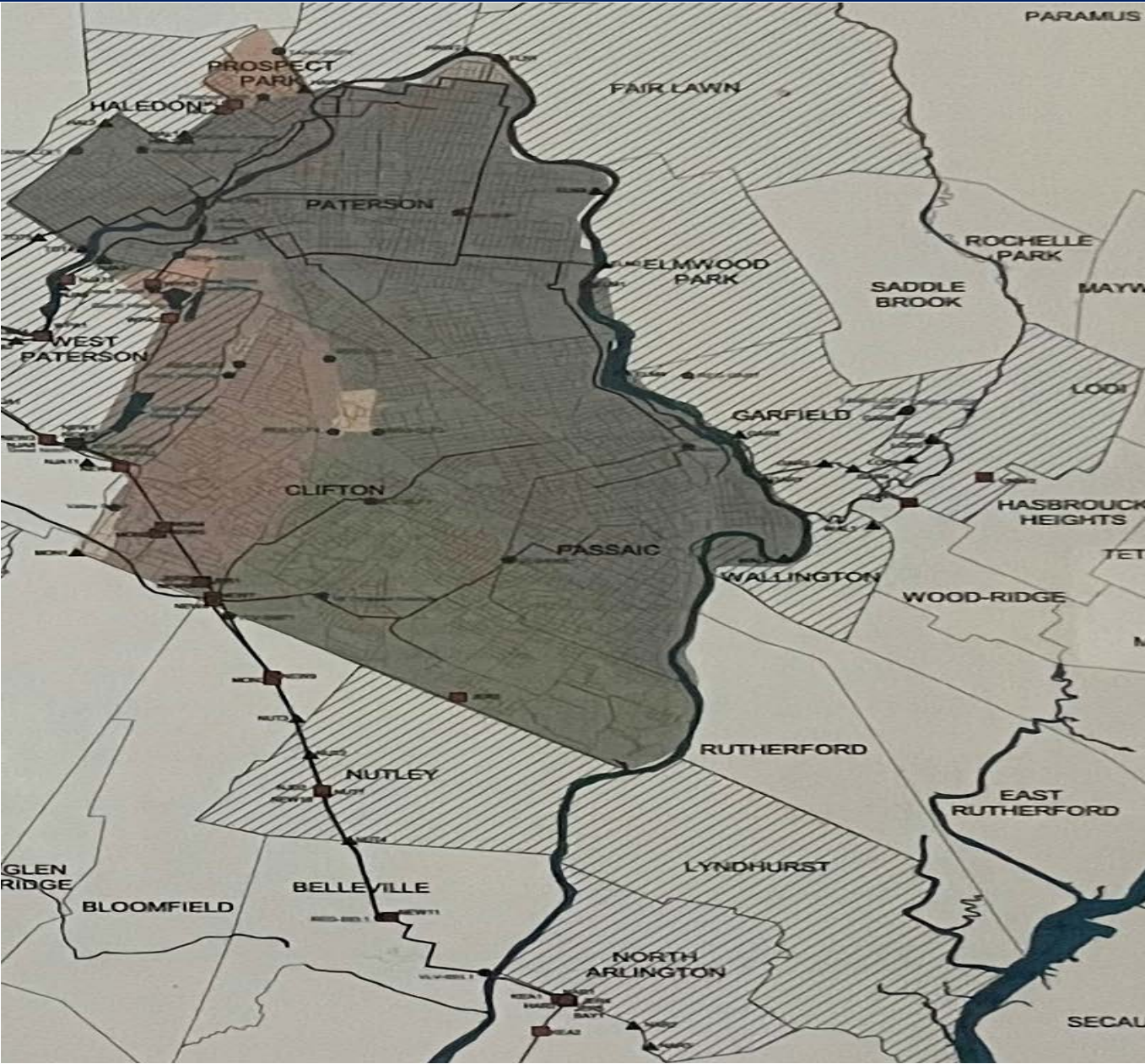
Discolored Water Issues

**Jim Mueller
PVWC Executive Director**

City of Clifton Council Meeting

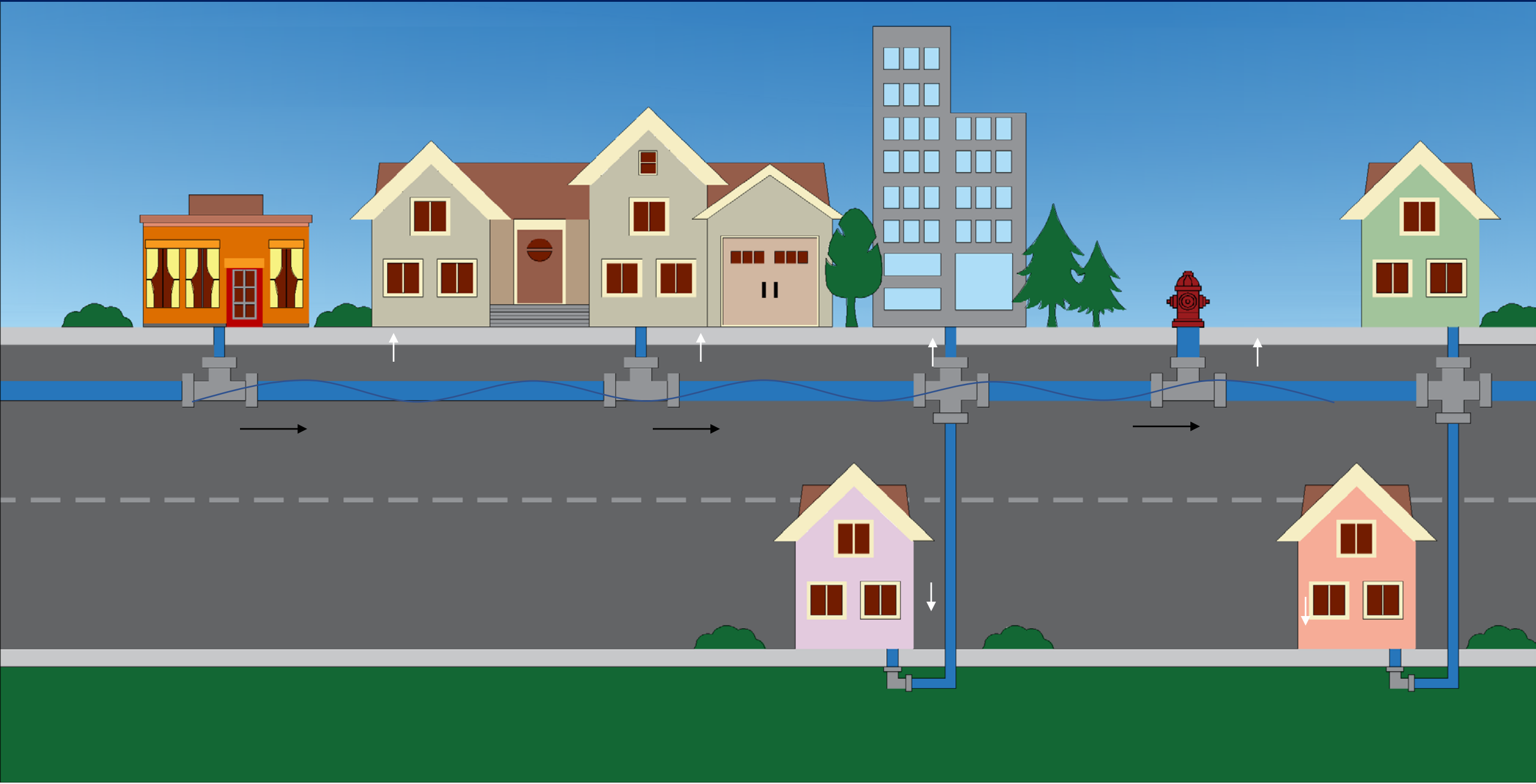
September 20, 2022

PVWC Watershed and Distribution System



- Retail: 650 miles of water mains;
110 miles of water main 16" and greater
 - Clifton
 - Paterson
 - Passaic
 - Prospect Park
 - North Arlington
 - Lodi
 - Post Brook
 - High Crest
- Wholesale: 22 Customers

Water Distribution System – Normal Operation



Hydrant Flushing – A Water Industry Standard



hydrant flushing and brown water



Clayton County, GA

<https://www.ccwa.us> › hydrant-flushing-waterline-maint... ⋮

Hydrant Flushing & Waterline Maintenance

A. When a **hydrant** is opened, there will always be temporary incidences of discolored **water** containing fine sediment particles making the **water** appear **brown** or ...

Carver, MN

<https://www.cityofcarver.com> › View › Fire-Hydr... PDF ⋮

Fire Hydrant Flushing – Frequently Asked Questions: Q. Why ...

The fine sediment mixes with the **water**, turning the **water** a cloudy or rusty **brown** color. This mixture is discharged out of the **hydrant**. There is no health ...

Arizona, Connecticut, Massachusetts, New Hampshire

<https://tataandhoward.com> › water-main-hydrant-flushing ⋮

Everything You Need to Know About Water Main Flushing

Flushing the **water mains** can remove the sediment and mineral build up, and improve the color, odor and taste of the **water** if it has been problematic.

Dover Township, PA

<https://www.dovertownship.org> › faqs › is-my-water-sa... ⋮

Is my water safe to drink after hydrant flushing?

Sep 1, 2022 — Your **water** is safe to drink. Occasionally, **water** becomes discolored after **hydrant flushing**. If this happens, run your cold **water** tap for a few ...

Brunswick, MD

<https://brunswickmd.gov> › vertical › Sites › uploads PDF ⋮

WHY DOES THE CITY FLUSH WATER LINES AND FIRE ...

Flushing the **water** system on a routine basis removes sediment from **lines** and keeps the entire distribution system “refreshed”. As a result of the line **flushing**.

Hydrant Use Impacts – Emergencies and Maintenance



Hydrant use may stir up sediment that has accumulated in the mains and cause discolored water – flow may increase up to 20 times (20x) compared to normal operation causing low water pressure.

Unauthorized Hydrant Operation or Misuse

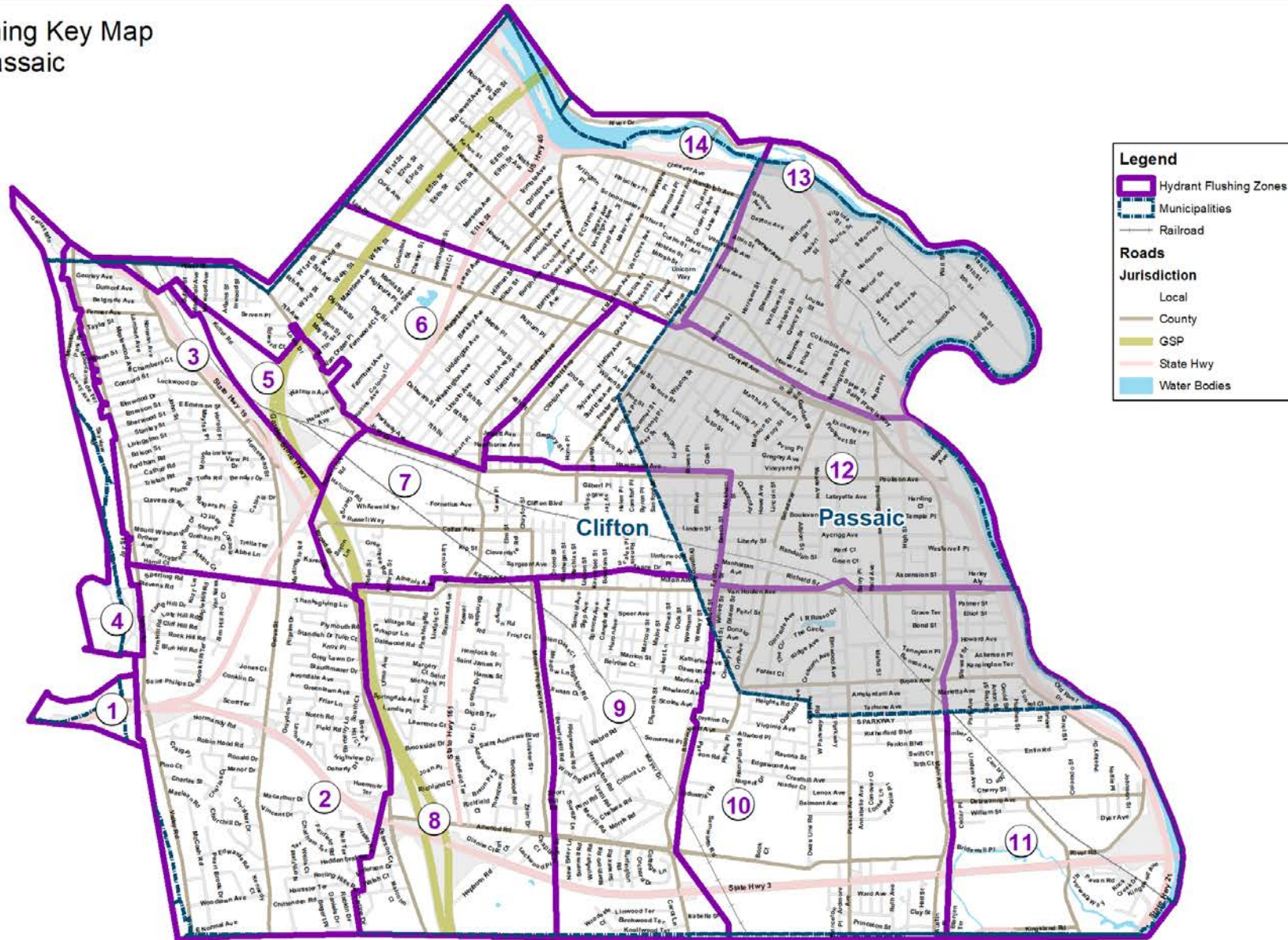


A water main break can occur due to water hammer which is a shock wave that moves through the pipe if flow is stopped abruptly. Discolored water can persist from frequent hydrant use in concentrated areas.

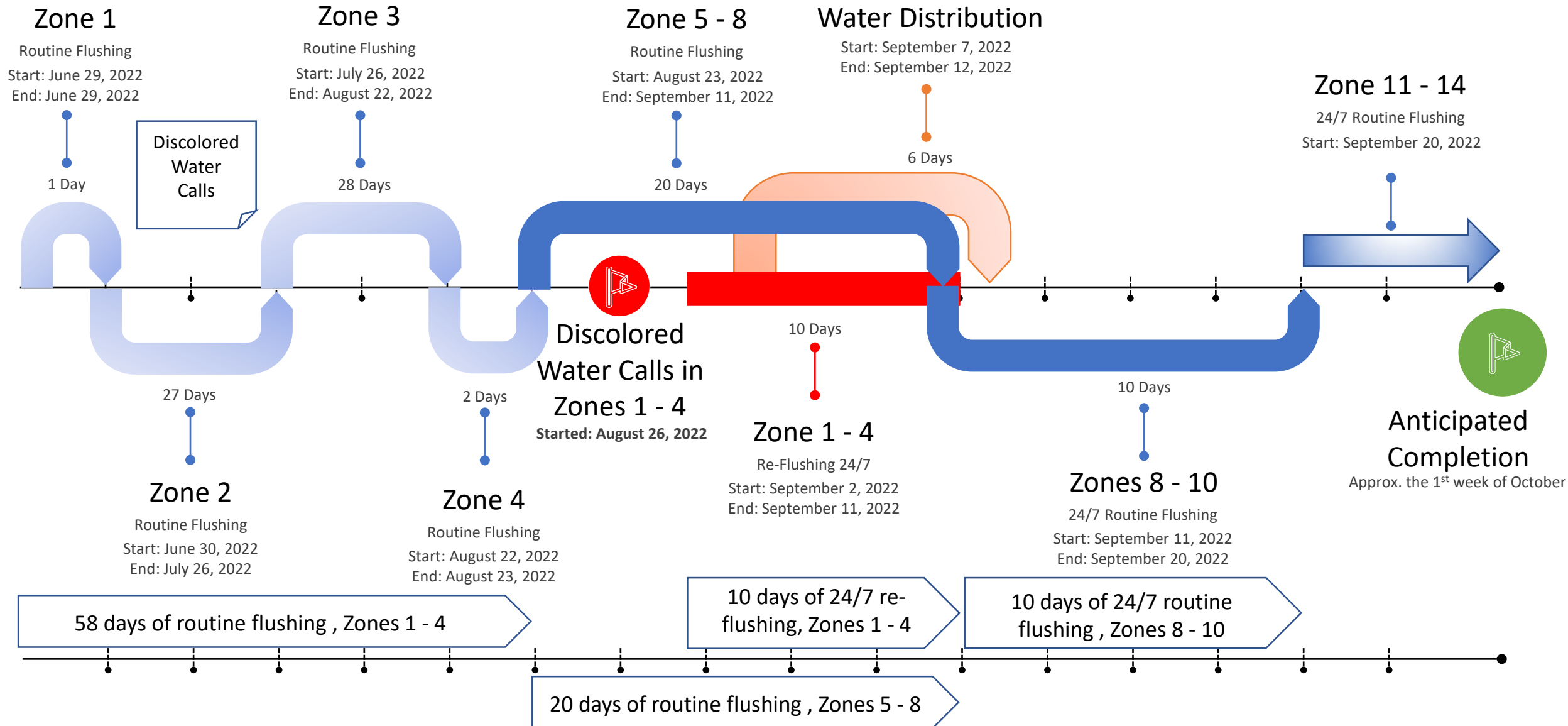
Clifton Map - All Flushing Zones

Hydrant Flushing Key Map Clifton and Passaic

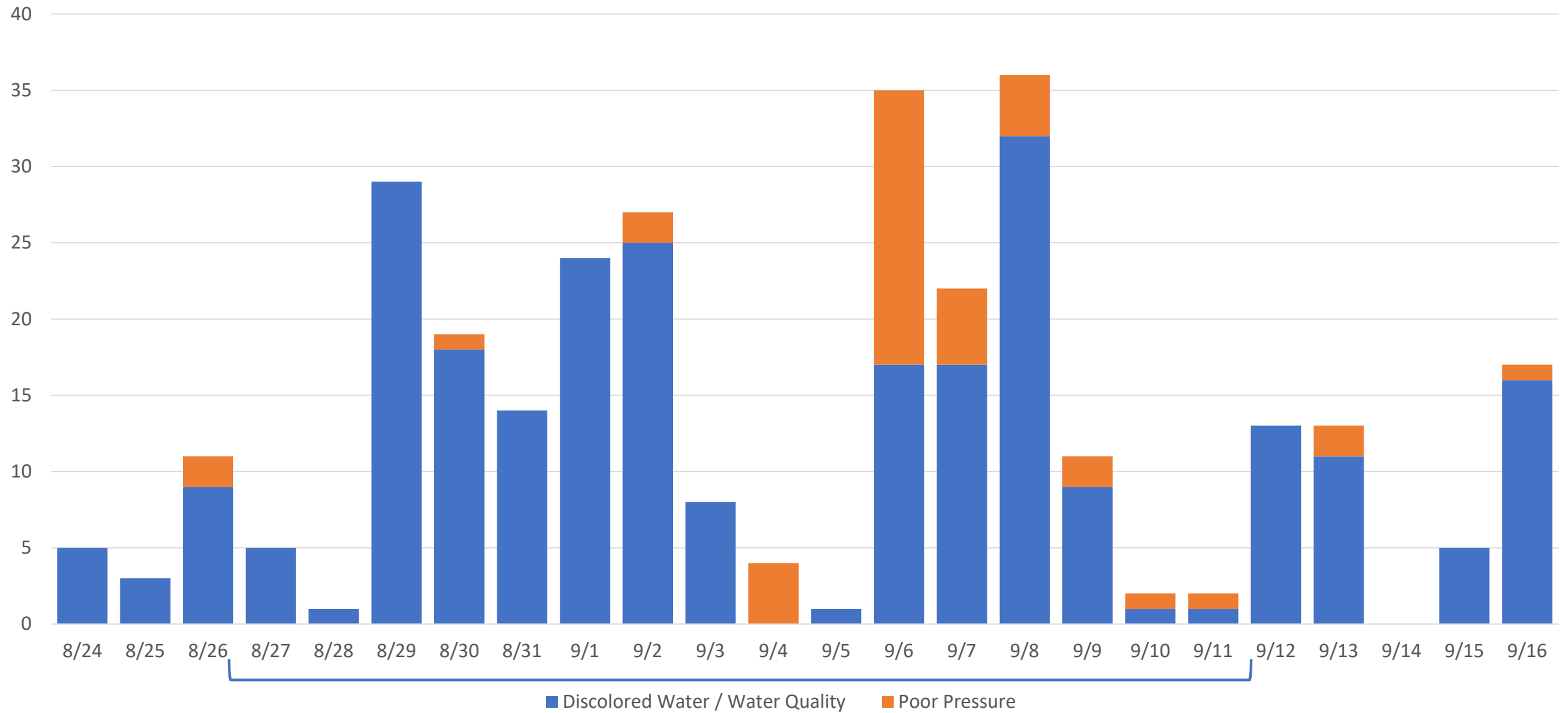
Date: 9/20/2022

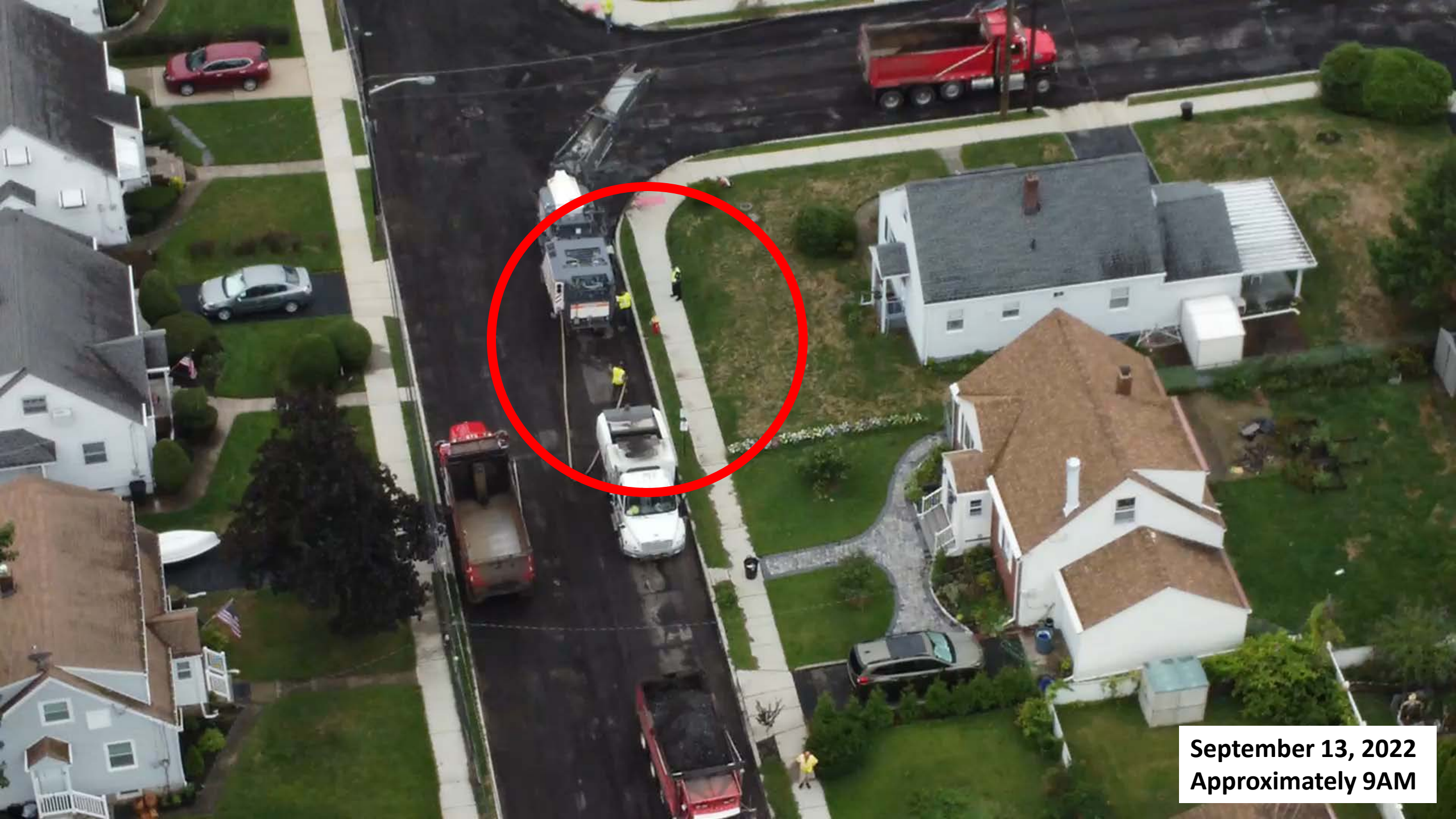


Clifton Annual Flushing - Timeline



Customer Service Complaint Call Logs





September 13, 2022
Approximately 9AM



September 12, 2022



September 12, 2022



September 12, 2022



September 13, 2022

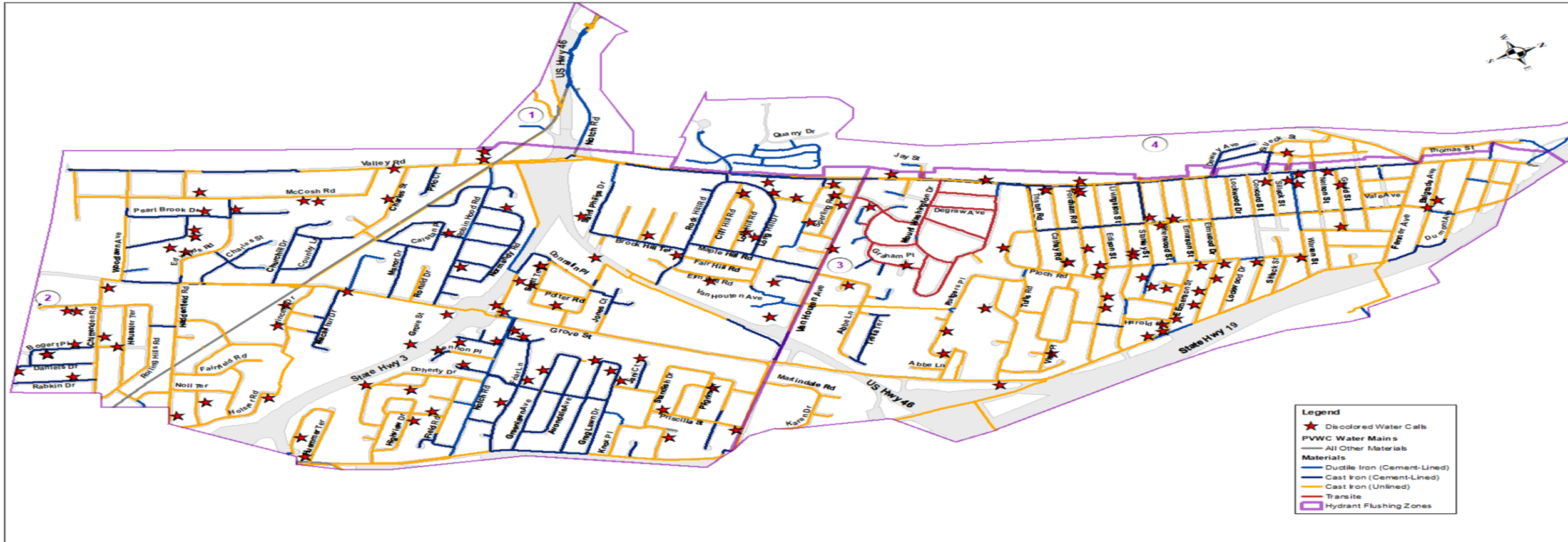


PVWC Short-term Plans to Address Issues

- Coordination – improve communication with utilities and owner cities on planned street work, development, paving plans and routine maintenance activities
- Permitting – develop formal permitting process for contractors to apply and submit payment to PVWC for water use
 - Highlight geographic area of work and timing/duration and point of contact
 - Fill contractor water trucks in Clifton yard or other owner City yards as applicable
 - Contractors must demonstrate proper hydrant use
- Flushing - more frequent flushing of problem areas
- Enforcement – enforce existing ordinances prohibiting unauthorized hydrant access
 - The City of Clifton's Code (§455-2) specifically prohibits the opening/operating of any fire hydrant:
 - A person shall be guilty of disorderly conduct if he:
 - Shall at any time or in any manner open or operate any fire hydrant, gate valve or other appurtenance of the water system or tamper with or damage any part of the water system or destroy or cause to be removed any part of the water system.
 - Has in his possession or on his person any hydrant or hydrant part belonging to the Passaic Valley Water Commission
 - Opens or operates, turns on, turns off, interferes with, attaches any pipe or hose to or connects anything with any fire hydrant, gate valve or other appurtenance of the water system or in any manner molests or interferes with same.
 - Exceptions: PVWC employees or duly authorized City of Clifton employees

PVWC Long Term Solutions

- Line and or replace water mains in problem areas and valve replacements



Great Notch Service Area, Clifton, Passaic County
Discolored Water Calls to PVWC
From August 29, 2022 to September 13, 2022



Date: 9/16/2022

Created By: Claire Nation

- Storage Tanks
 - Effective corrosion control, maintain pH

Communications

- **Current Emergency Notification Solution**

- Utilizes the City of Clifton's Emergency notification infrastructure.
- Relies upon a voluntary service subscription model (i.e. opt-in model)

- **Future PVWC Emergency Notification Solution**

- Work is underway to design an Emergency Notification System, where residents would have the option to opt-out.
- PVWC Engineering & IT Departments are working together to integrate systems to leverage targeted, timely and effective customer notifications.

- **Bridging the Gap**

- Press releases
- Website / Socials
- Mayor, City Council and administration updates

Thank You For Your Time!

Q&A

973-340-4300

www.PVWC.com

CustomerService@pvwc.com

ExecutiveDirector@pvwc.com