

Serving our customers

Elevating the Customer Experience - How Tacoma Water Implemented Electronic Notifications for Events Impacting Water Supply

PNWS AWWA 2025 – Public Information Track

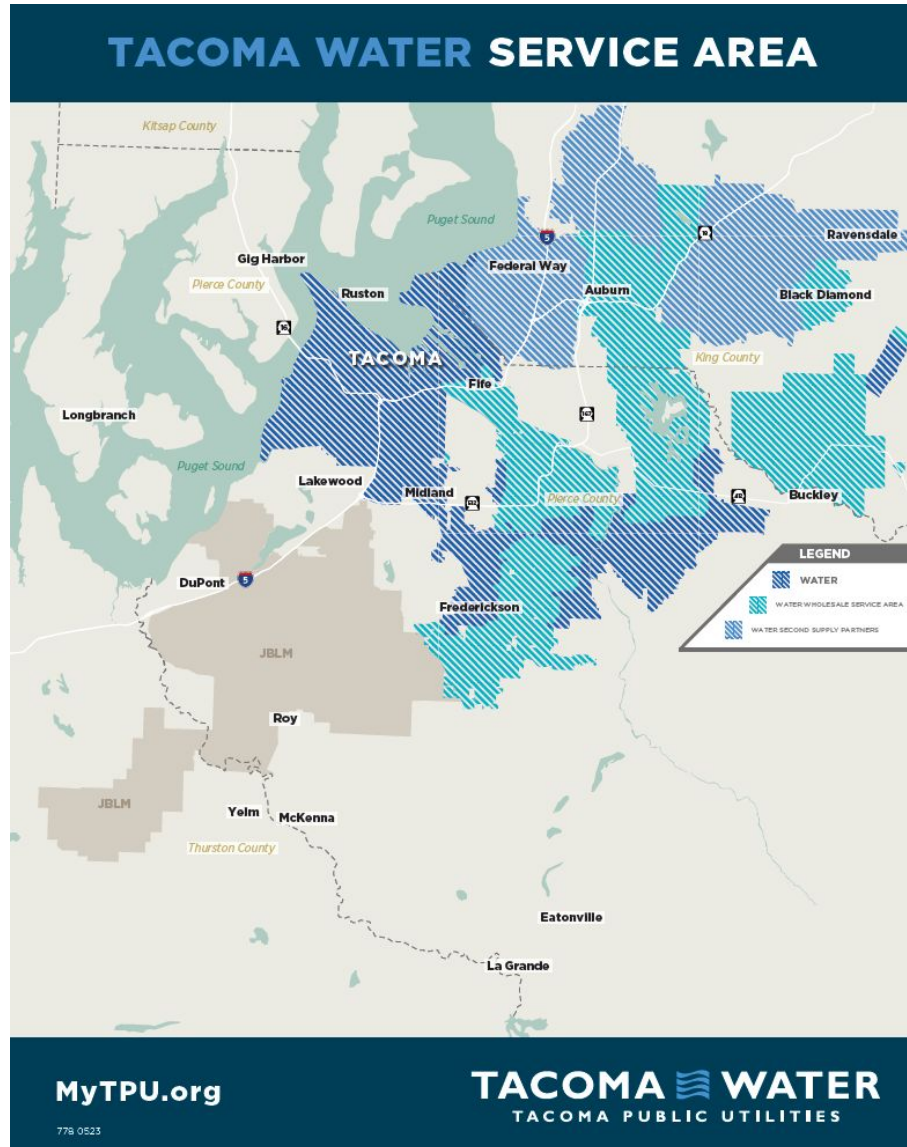
About Me

Tyler Cummings

Sustainability Analyst, Leaks Specialist, Nerd



About Tacoma Water



- 119 square miles of service area
- 281 employees
- 108,897 residential customers
- 7,251 commercial and industrial customers
- 1,428 miles of water mains
- Up to 150 million gallons per day from the Green River
- Up to 40 million gallons per day from local wells

The Opportunity

Our Challenge

- No way to proactively or reactively send customers **electronic notifications** of water events impacting them
- Tacoma Power was moving to a new electronic notification platform, and customers expect a **uniform TPU experience**

Our Goal

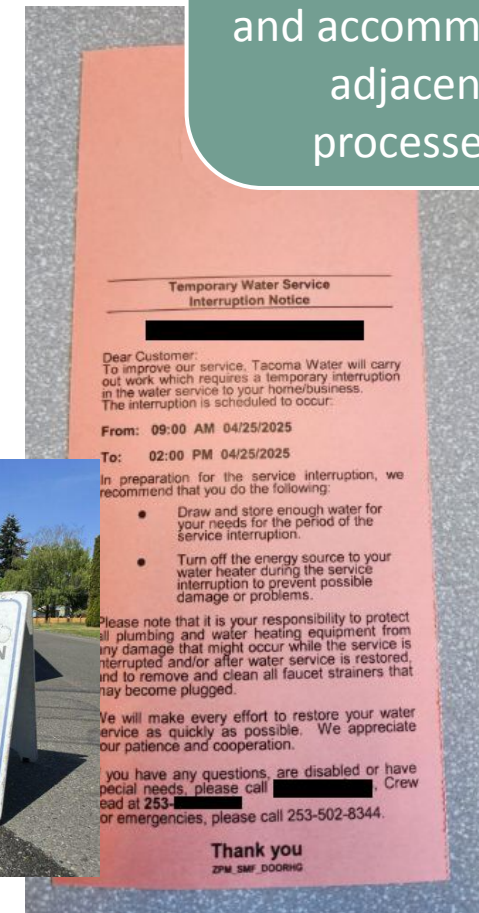
- Implement both an **outage map** and a **customer notification** feature as supplements to existing communications methods.

Existing Notification Methods

- Public Outage Map (Tacoma Power)
- Public Flushing Map (Tacoma Water)
- Tacoma Water had existing communication methods for outages:
 - Sandwich Boards
 - Automated Phone Calls
 - Door Hangers
 - Door Knocking
 - Social Media Posts
 - Website Banner Messages

REQUIREMENT

New solution to complement existing solutions and accommodate adjacent processes.



- **What**

- TPU-wide initiative to notify and update customers for planned & unplanned utility events impacting them via text & email communications and a customer-facing event map

- **Why**

- Elevate customer service
- Reduce in-bound customer calls
- Reduce public health risk during emergency events

- **How**

- Send email & SMS messages to impacted customers based on their contact preferences
- Enable staff & crews to push event updates and map visuals to our customers through an online portal

Water service disruption (event) notifications & event map

EVENT TYPE

Planned Water Outage

Unplanned Water Outage

Planned Water Quality

Unplanned Water Quality

Emergency

DEFINITION

Internal construction work or contractor working with water system

Unexpected service interruption **not** related to water quality (main break, etc.)

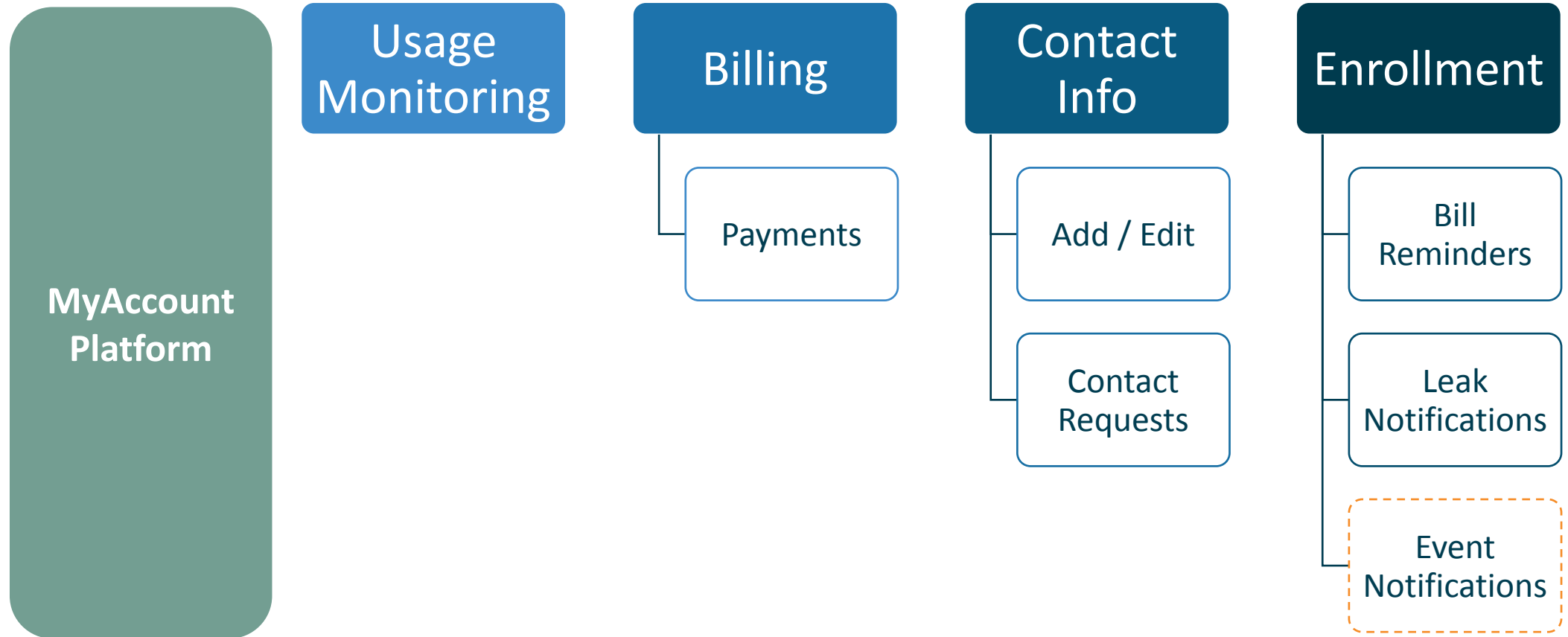
Routine water main flushing

Discoloration or sediment in water supply (caused by firefighting activity, main break, etc.)

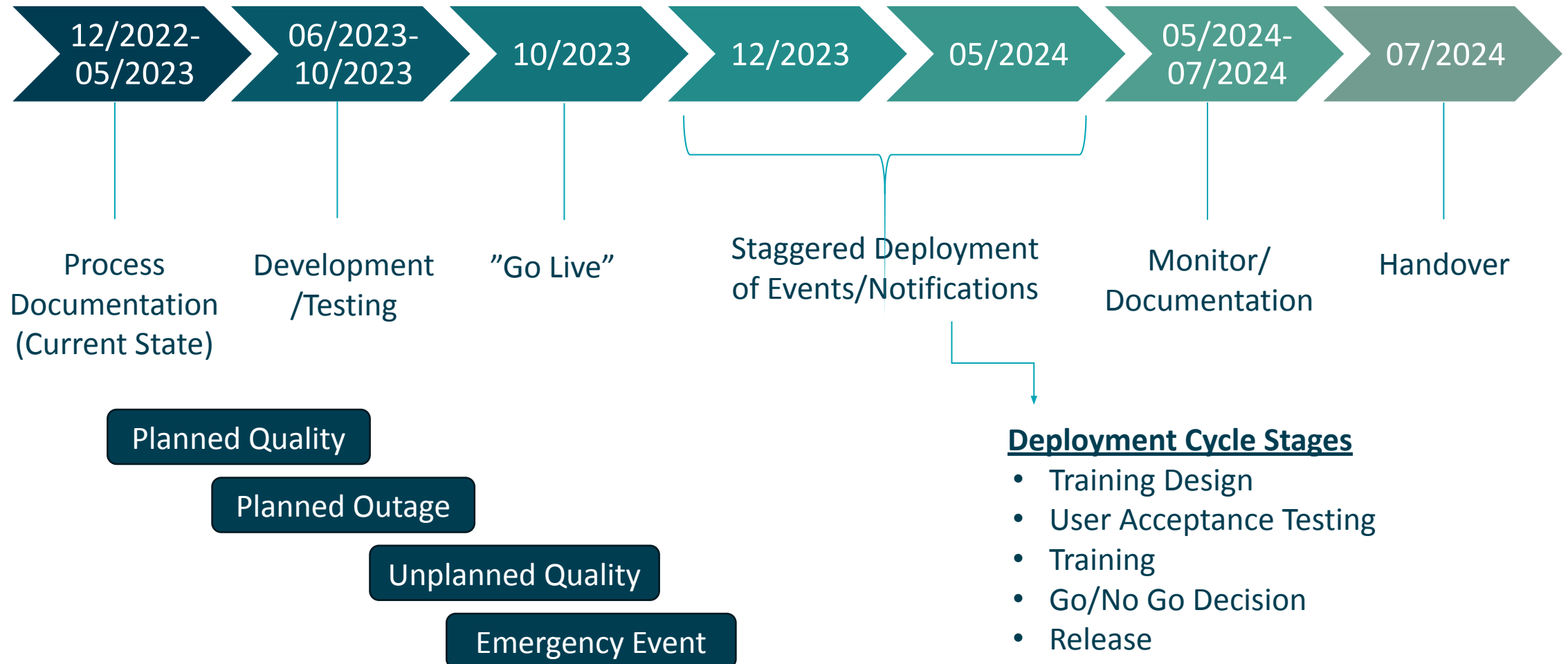
Boil Water, Do Not Use

Project Focus 2

Customer notification enrollment process



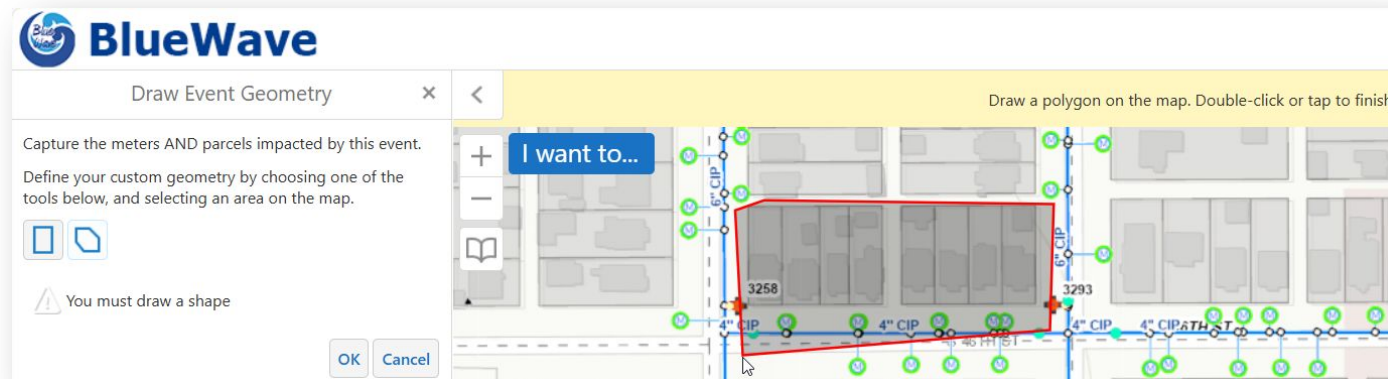
High Level Timeline



The Solution – How it works

Upon validation of an event, the event owner...

- Creates a new event in the tool with relevant details (cause, severity, duration, status).
- Draws event area on map.
- Publishes event to “Water Events” Map
- Sends text/email alert to impacted, enrolled customers



The screenshot shows a 'Create Event Notification' form. The form includes the following fields and options:

- Event Title *
- Event Type * (Please Select)
- Cause *
- Severity Level (Select if a Quality Event)
- CEP Status *
- Public Map Status * (Event Identified)
- Start Time * (Apr 23, 2025 1:)
- Estimated Completion * (Apr 23, 2025 6:47 P)
- Event Owner * (Redacted)
- Phone Number *
- Status Update (Internal) * (The [###] Group will conduct a [TYPE OF WORK] on [DATE] to [PURPOSE] in the [LOCATION].)

Event Management Tool

- Through the tool's interface, we can:
 - View Guaranteed Service Customers
 - Update the event area to add/remove impacted customers
 - Create and manage notifications for multiple overlapping events occurring at the same time.
 - Generate list of impacted customer and streamline printing of door hangers
 - Generate email to inform water staff of event.

Event ID: OUT-2000024994: ▾ 1 of 5 ✕

☆ Event ID: OUT-20000249943

Planned O: 5000 S Puget Sound Ave
Type: Planned Outage
Start: Mar 31, 2025 9:00 AM
Estimated Completion: Apr 1, 2025 3:00 PM
Affected Customers: 1

Event Owner: Brandon Corey
Phone: 253.302.9014

Latest Status:
The 400 crew is conducting a shutdown to cut out a main in conflict with a new sewer lateral. The main will be left off from 3/31-4/1. The only service in the shutdown is not active, There are no hydrants in the shutdown.

Customer Communication Status: Completed
Public Map Status: Completed

Communications
Internal Water Email Sent: Never

- [Generate Email](#)

Door Hanger List Created: Never

- [Create Door Hanger List](#)

Last Customer Communication: Apr 18, 2025 12:48 PM

- [Send Customer Update](#)

Active Communication Pauses: 0
Overlapping Event Settings:

- [Add Communication Settings](#)
- [View / Resume Paused Communications](#)

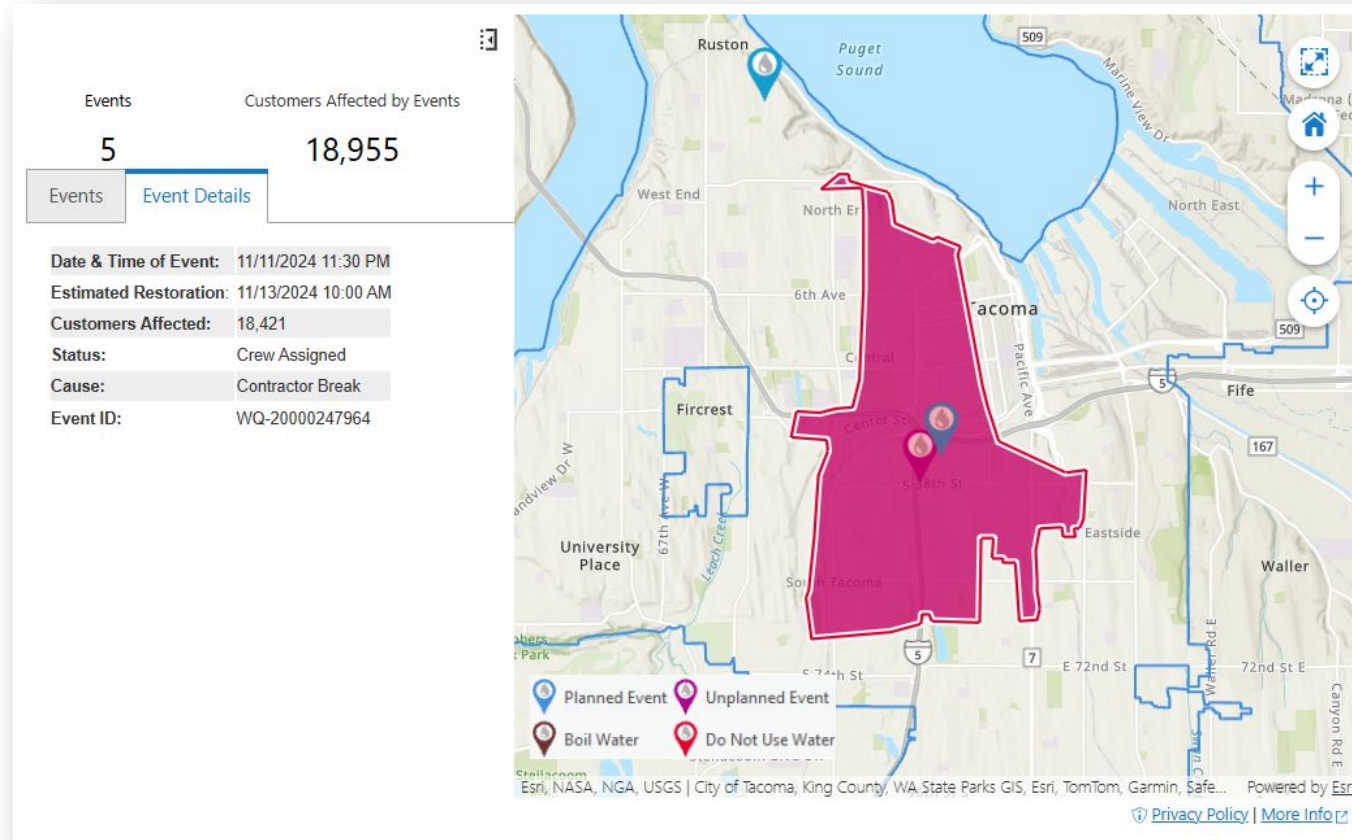
Edit Event

- [Update Event Details or Close Event](#)
- [Update Event Geometry](#)

Last Updated: Apr 18, 2025 12:48 PM

[View Additional Details](#) | [Add to Results](#)


Publicly Available Information



Webpage visitors can see:

- Start Date/Time
- Estimate Restoration Date/Time
- # of Customers Impacted
- Status of Event
- Cause for Event
- Impacted area

Customer Notifications



CONTACT | OUTAGE MAP | PROFILE | ENGLISH | LOG OUT

Account Overview | Billing | Payments | Usage | Moving Services | Customer Center

Notifications

PROFILE

NOTIFICATIONS

PAYMENT METHODS

Account # [redacted] | Address: [redacted] TACOMA WA 98406

Email address [redacted]@yahoo.com | Phone number [redacted]

Contact information

News and updates from TPU ☐

Notification language preference English

Quiet hours Between [redacted] and [redacted]

Water leak notification None

Bill reminder notifications

Water Outage notifications

| Account | Address | Notify method |
|------------|-----------------------|---------------|
| [redacted] | [redacted] TACOMA, WA | None |

Email
Text
Email + Text
None

Power Outage notifications

MyAccount is a free service we provide that is Federal Communications Commission (FCC) compliant. Regular text message and data rates may apply. You may decline the text notification service at any time by replying STOP to the messages you receive or by unenrolling in your MyAccount Profile settings at any time.

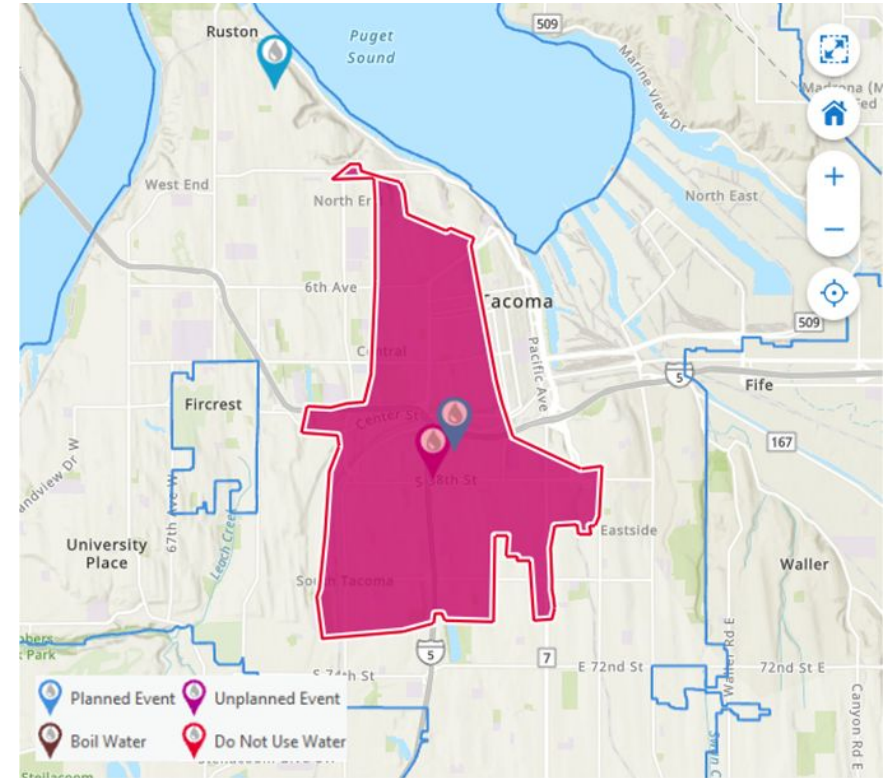
CANCEL | SAVE CHANGES



Stress Test

- **November 2024**

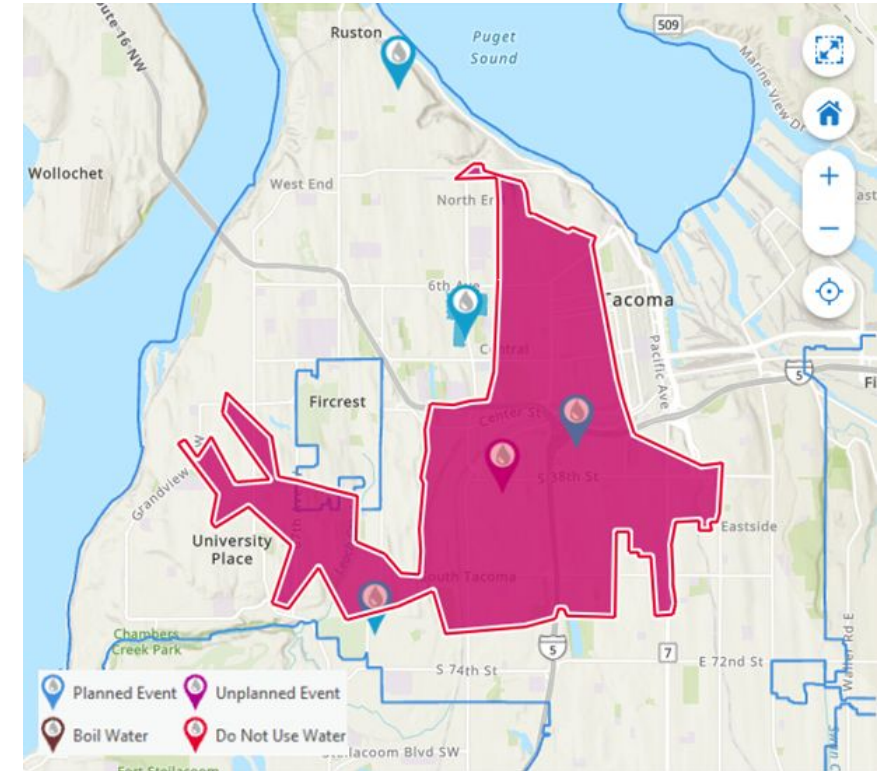
- Significant Water Quality Event on Nov. 9
- Broken joint at intersection of 24" mains
- Caused by contractor
- 18,000, then 22,000 impacted customers
- First large event to use new tool



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CHALLENGES

New tool utilized during outage events

Low percentage of customer base enrolled in notifications

Customer portal existed before feature release

Engaging stakeholders/end users more often

Timeline/resource limitations

Customer adapting to referring to map before calling

FOCUSED IMPROVEMENTS

Deferred release of Unplanned Outages

Expanding awareness to offering through communication channels

What's Next?



- Build automated reporting on tool efficacy
- Targeted customer outreach; auto-enrollment feature
- Potential rollout of unplanned water outages
- Add information on bottle-filling stations to map as alternative water supply during events.

Questions?

Tyler Cummings, tcummings@cityoftacoma.org

Thank you!

