BOIL WATER ADVISORY
July 2, 2019

DEBRIEF

DPW Commission
July 17, 2019
PRECAUTIONARY BOIL WATER ADVISORY

- Unplanned depressurization; apparent substantial area of distribution system

- A result of extensive capital work on aged infrastructure in South End

- Hydraulic models show that sufficient operating pressures should have been maintained by third feed to South End ("Englesby" feed)

- NO Known Contamination of Water Supply

- 10 BacT samples taken from area confirmed no contamination

PRECAUTIONARY BOIL WATER ADVISORY VS.
BOIL WATER ORDER VS.
DO NOT USE
WHAT WAS DIFFERENT ABOUT THIS SERVICE DISRUPTION?

NEWER EMPHASIS FROM REGULATORS:

- VT DEC has increased focus on the need for boil water notices to be considered when there are “non-routine operating conditions”
  - October 2018 “Boil Water Procedure”
  - May 2019 Burlington System Drinking Water Permit to Operate

INCIDENT CHARACTERISTICS:

- Wider area than planned
- Geographic extent of possible impacts
- Apparent duration of depressurization

Increases the possibility of contamination
INITIAL RESPONSE

- Made determination to issue boil water notice
- Posted message on Facebook and Twitter (with updates)
- Flushed hydrants in the area and confirmed good chlorine residual
- Confirmed approach with State
- Issued press release
- Media conference call
- On camera interviews
- Created extent of boil water map
- Posted message on roadside message board(s)
- Red Alert Banner on City webpages
- Made bottled water available to customers unable to boil water
- Sent direct message to customers who have provided addresses in our water billing system (delayed timing; relies on people providing emails)
- Contacted Champlain Housing Trust
- FB/Twitter updates
- Worked with Front Porch Forum to send out early message
- City Councilor regular notifications
- Created “Boil Water Advisory” Page
  - https://www.burlingtonvt.gov/DPW/Boil-Water-Advisory
IMPROVEMENTS NEEDED

• **Need easier, direct communication system for timely notification**
• Make it clear from onset that it was “precautionary advisory” and that there was no known contamination event
• **SOP for timely escalation of “non-routine” conditions by operations and field staff (including definitions of the “new” non-routine)**
• Further refine SOPs and checklists for how to handle variety of distribution operational conditions and meet AWWA standards to **avoid** boil water advisories where possible and conditions are safe
• **SOP for Boil Water Issuance and Communications**
• Improve risk analyses, contingency pre-planning for shut downs of more significant supply feeds
• Better documentation of locations of service disruption
• Education regarding boil water notices; FAQs and outreach to special customers so they can develop appropriate contingency plans
VT Alert System

- Powerful system with ability for users to subscribe to method of contact and types of notifications
- City wide or localized areas
- Ability to reach non-subscribers who have landlines

Timeline of Progress

- July 10: DPW and DPR staff received training on administration of system
- July 17: Meeting held with other departments, follow up meeting scheduled for week of July 22
- Looking to advance “sign up” campaign collaboratively as a City as soon as possible