Water System Leak Response

Working under pressure

Kipp Fockler Utilities

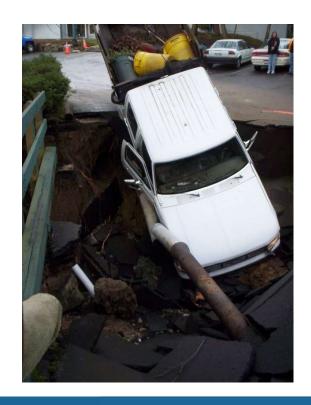
March 04, 2021





Direction Needed from ESC

No action by the Commission is required at this time. This is an informational briefing regarding water main breaks.







The presentation will focus on these key areas in responding to a water main break:









Risk Assessment Response

Recovery

People

- ✓ Hire
- ✓ Train
- ✓ Retain







Proactive measures



- ✓ Leak Detection
- √ Tabletop Exercises
- ✓ ICS
- ✓ 24/7 Response Team









Equipment

- ✓ Select
- ✓ Train
- ✓ Maintain







Hydroexcavator

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- ✓ Safer
- ✓ Less impact to traffic
- **✓** Efficient







Materials

- ✓ Shop
- ✓ Stock
- ✓ Innovate





Why did this happen?



Structural Failure

- ✓ Pipe Material
- ✓ Pressure
- ✓ Corrosion
- ✓ Old installation practices
- ✓ Ground movement
- ✓ Tree roots

Third Party

- ✓ Underground boring
- ✓ Contractor neglect







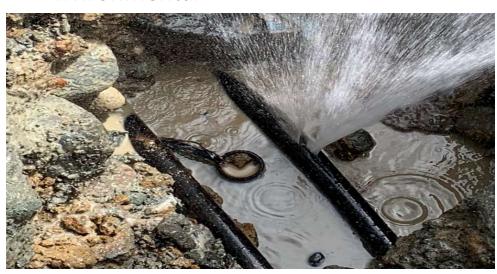


Risk Assessment

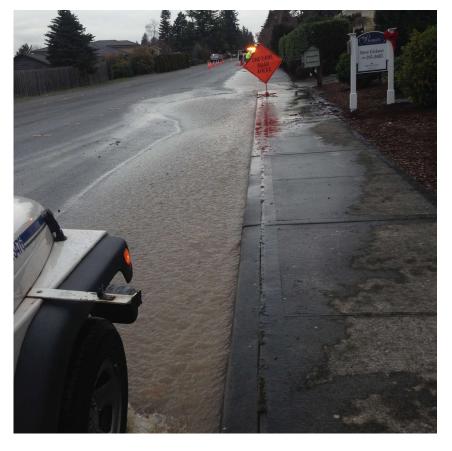
Mitigation Strategies



- ✓ Throttle valves
- ✓ Maintain + pressure
- ✓ Temporary Water
- ✓ Isolate
- ✓ Downstream Impacts
- ✓ Environmental







We don't go home until the Water is on!

- ✓ Gather information
- ✓ Control
- ✓ Mobilize
- ✓ Repair
- ✓ Restore
- ✓ Recover
- ✓ 24/7 Response







Repair

Step 1

- ✓ Notify
- ✓ Locate
- ✓ Isolate
- ✓ Traffic Control
- ✓ Inform
- ✓ Damage assessment

Step 2

- ✓ Break ground
- ✓ Excavate
- ✓ Safety measures
- ✓ Repair options

Step 3

- ✓ Repair
- ✓ Flush
- ✓ Maintain Water Quality
- ✓ Flush









Impacts

- ✓ Property Damage
- ✓ Traffic disruptions
- ✓ Boil Water
- ✓ System Impacts
- ✓ Noise



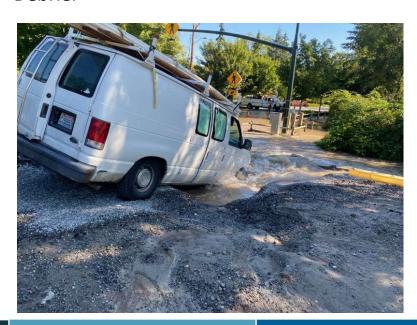


Recovery

Wrap up and prepare for the next one.

Restoration

- ✓ Backfill
- ✓ Asphalt
- ✓ Monitor
- ✓ Document
- ✓ Claims
- ✓ Debrief





"We are always working under pressure"





Number of Water Main Repairs

2016	6 - 20
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$$2017 - 34$$

$$2028 - 25$$

$$2019 - 22$$

$$2020 - 29$$

Number of Water Service Repairs

$$2016 - 287$$

$$2017 - 269$$

$$2018 - 219$$

$$2019 - 195$$

$$2020 - 190$$

End of Presentation



We don't go home until the Water is on!

Thank you for your time listening to today's presentation on "Water System Leak Response"



