WQ Update – Main Break Response

Operating Board

November 7, 2013



Response to Main Breaks

- 2 Recent Events: U-Village & Capitol Hill
 - Field Response & Repair
 - Water Quality
- Pressure Loss and Boil Water Advisory Decision
- On The Horizon



U-Village Break

- 10/8/13, ~ 3:00pm
- 16" main
- Several thousand customers impacted

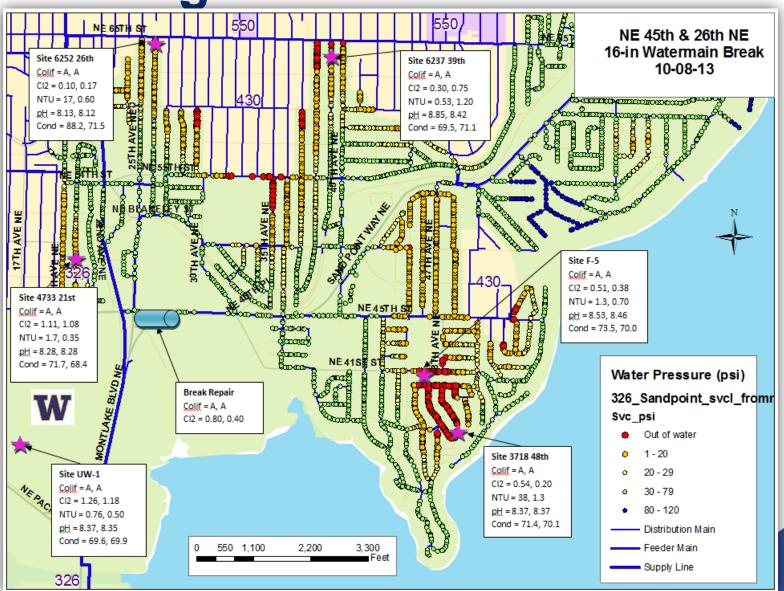




Seattle

Public
Utilities

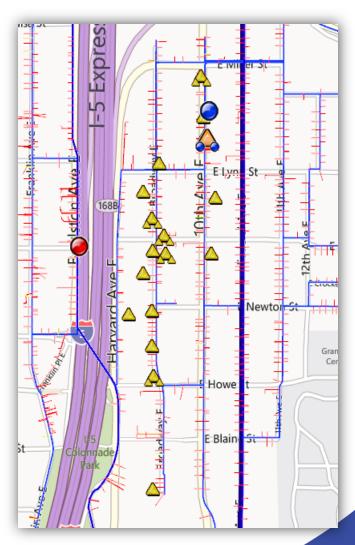
U-Village Break



Seattle
Public
Utilities

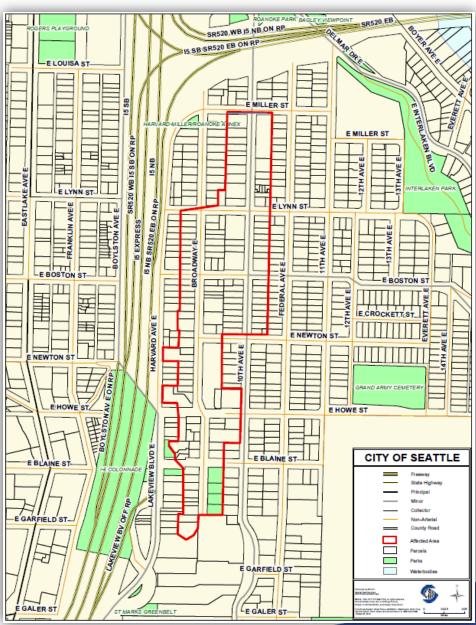
Capitol Hill Break

- 10/30/13, ~ 3:45am
- 8" main
- About 145 customers impacted





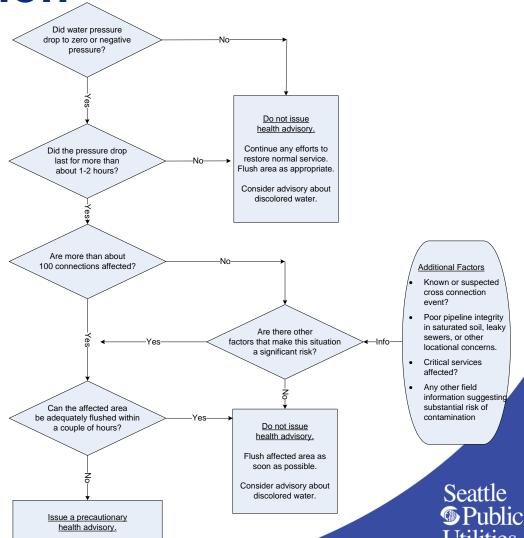
Capitol Hill Break





Pressure Loss and Boil Water Advisory Decision

- Boil Water or Not?
- Water Quality Actions
 - 2 rounds of sampling
 - Site specific flushes
 - Good repair practices



On The Horizon

WDOH *DRAFT* Guidance

Type I Break	Type II Break	Type III Break	Type IV Break
Positive pressure maintained during break	Positive pressure maintained during break	Loss of pressure at break site or limited water system depressurization elsewhere	Loss of pressure at break site <u>and</u> depressurization elsewhere in the system
Pressure maintained in pipe during repair	Pressure maintained at break site until pipe exposed & hole dewatered, shutdown limited to immediate valved off area, no loss of pressure elsewhere in system	Loss of pressure at the break site while the pipe is still buried or submerged / or no pressure loss at break site, but pressure loss elsewhere in the system	Loss of pressure at the break site while the pipe is still buried or submerged and widespread depressurization
No signs of contamination intrusion	Limited possibility of contamination intrusion	Possible contamination intrusion	Possible/ actual contamination intrusion



On The Horizon

Water Research Foundation Guidance

- Effective Microbial Control Strategies for Main Breaks and Depressurization-Project 4307
- Will be published early 2014
- Should influence states and impact C651: AWWA Standard for Disinfecting Water Mains



On The Horizon

Lessons Learned

- Early communication to customers is better
- Early event information is limited
- Pre-planned messaging is key
- Health protection and customer confidence are primary drivers



Questions?

