

Tolt Dam Warning System Failed Weekly Siren Test on January 13, 2021

City of Carnation Council Meeting, January 19, 2021

Seattle Public Utilities



City of Seattle

Water Supply Conditions

Water System

Infrastructure

History of Stewardship

Cedar Treatment Facility

Tolt Treatment Facility

Drinking Water Reservoirs

Dam Safety

Lake Youngs Reservoir

Tolt Dam

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Dam Safety

Dear City of Carnation residents:

The normally scheduled Wednesday at noon alarm test of the Tolt Dam Warning System did not sound on January 13, 2021. Seattle Public Utilities (SPU) apologizes for any confusion or concern this might have caused.

The storm system from the previous night resulted in scattered power outages and SPU believes it affected the January 13 testing.

About an hour before the noon test was scheduled to occur on January 13, SPU began notifying our partner agencies, including the City of Carnation, about the possibility that the alarm would not sound.

We want to reassure you that dam safety monitoring was never interrupted, and SPU continues to monitor the dam 24/7 using various technology, including cameras and sensors installed along the Tolt Dam.

Thank you for your patience as our engineers continue to address the issue. If you have any questions or concerns, please contact our Dam Safety Supervisor Taryn Sass at (206) 850-9737 or Taryn.sass2@seattle.gov.

Contact

Dam Safety Supervisor

Taryn Sass
206-850-9737

Taryn.sass2@seattle.gov

Lake Youngs and Tolt Dam facilities

206-684-3933

For emergency related questions, please contact your local emergency management agencies.



24/7 Safety Monitoring Never Interrupted

- Power failures across the region 1/13/21
- Backup worked for dam safety monitoring
- Audio warning malfunctioned for weekly siren test – this has been fixed



Emergency Notification

- Dam warning system – siren and audio alert
- More tools:
 - In emergency, SPU launches Emergency Action Plan callouts – this triggers phone tree to alert first responders, Riverview School District, City of Carnation officials and others
 - Emergency alerts to landline phones and cell phones – King County Emergency Management and NORCOM



Agenda

- What Happened
- Next Steps
- Q&A



Questions You Have Asked

- Why didn't the sirens go off on Jan 13's weekly test?
- What did SPU and others do to respond?
- Shouldn't this public safety system work during a power outage?
- What are we doing to improve?



What caused the weekly test failure?

- The dam warning system has two communications pathways
 - Fiber optic (owned and operated by King County)
 - Microwave (backup)
- Power outages on Jan 13 caused the King County fiber optic system to go off-line
- Microwave system took over and functioned for the cameras and monitoring instruments, but not for the audio (sirens)



What caused the weekly test failure?

- A control switch in the microwave system was set incorrectly
- The switch has been set correctly and tested
- The microwave system has been tested and is fully working, including sirens



How did SPU communicate?

- We conduct a pre-test every Wednesday morning, before the noon siren test – to make sure the weekly test will work
- The pre-test indicated a potential problem and we dispatched technicians immediately
- Emergency Action Plan activated
 - Calls made to City of Carnation and emergency partners before and after noon test
- Coordinated with King County Office of Emergency Management on public notification
- Added the information to SPU and City of Carnation web site and social media



What are we doing to improve?

- Adding more system testing into regular protocols
- Continuing to participate in evacuation planning and emergency communications workshops
 - King County Office of Emergency Mgmt and Northeast King County Regional Public Safety Communication Agency (NORCOM)
- Accelerating the project already planned to replace the dam safety warning system



Design and Installation

- Phase 1 Siren Replacement
 - Quarterly community meetings begin February
 - Design completed, 3Q21
 - Equipment delivered, 3Q21
 - FCC Permits issued, 4Q21
 - Construction completed, 2Q22
- Phase 2
 - Quarterly community meetings begin February
 - Design completed, 3Q21
 - Equipment delivered, 2Q22
 - FCC Permits issued, 3Q22
 - Construction completed, 1Q23

Questions and comments

