



Cascadia Subduction Zone Exercise June 7-9, 2016



April 2016



Large Scale Regional Tabletop Exercise Simulating a Magnitude 9 Earthquake June 7-9, 2016

Participants:

- Washington
- Oregon
- British Columbia
- Alaska



Cascadia Rising Exercise



- Organized by FEMA
- Will test the region's ability to respond to a CSZ quake
- In King County > 30
 agencies are participating
 so far
- To participate contact your jurisdiction's Office of Emergency Management



In addition to subduction zone quake our region is at risk from:

- Deep Quakes like the Nisqually Quake
- Crustal Quakes shallow quakes







Crew is a multi-state, multi-discipline group dedicated to earthquake research and response planning. This video gives an overview of the earthquake hazards of the Pacific Northwest

Earthquakes of the Pacific NW

Vancouver BELLINGHAM PORT ANGELES EVERETT SEATTLE Washington OCEAN 12 **PORTLAND** LINCOLN SALEM NEWPORT Scenari 101 Oregon COOS MEDFORD **HO1** Legend WESTE VII: Very Strong V: Moderate Native American Shaking Severe Shaking Shaking

CSZ Quake Impacts

- Along the I-5 corridor there will be up to 6 minutes of shaking
- 30% of G of ground motion
- The long duration of shaking will result in extensive liquefaction

Pacific Ocean LEWIS Legend

Coastal Tsunami Inundation Area

- The coastal areas of WA and OR will be heavily impacted
- In WA and OR 6oK people live in the <u>inundation zone</u>
- Depending on the season another 115K would be at risk
- The first waves would hit in 30-60 minutes

TSUNAMI HAZARD ZONE

Fortunately the Lower Puget Sound

is Not in Danger from a Coastal Tsunami

- Because of the geographic east/west orientation of the Straight of Juan de Fuca, however
- Seiches (sloshing) will occur on local water bodies



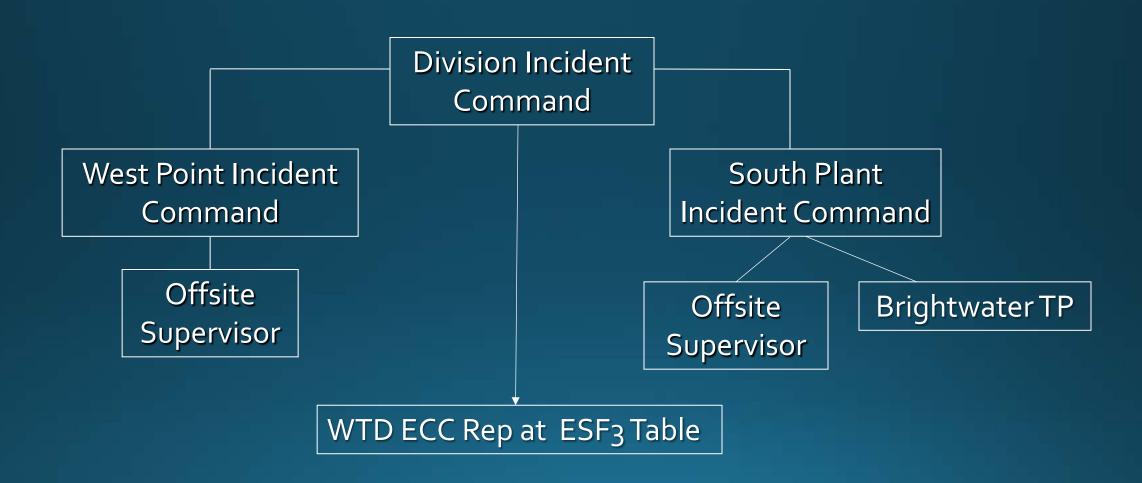


During the exercise the WTD will

- Test our earthquake response procedures, including assembly and roll call
- Practice the implementation of our Division Incident Command procedures
- Test our ability to communicate from the plants to King Street Center and to the KC ECC using the 800 MHz radio system
- Test our ability to perform damage assessments using Applied Technology Council's (ATC-20) protocols



WTD Division Operations Center



Emergency Operations Centers (EOC) and the KC Emergency Coordination Center (ECC)

EOCs

- Local Cities and Special Purpose
 Districts manage their emergencies
 through their cities' EOCs
- They provide damage/situation reports to the ECC
- Can request assistance or resources through the ECC

KC ECC

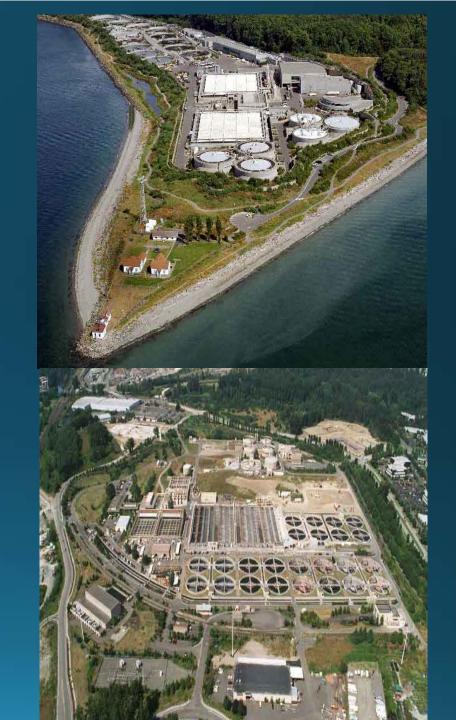
Coordinates emergency activities across the county



 DNRP staffs the Emergency Support Function (ESF) 3 section which coordinates public works activities

WTD is Developing a Resiliency and Recovery Plan

- To improve our disaster resilience
- Conduct Vulnerability
 Assessments of our critical facilities
- Identify retrofits to improve the resilience of key facilities



Earthquake Preparedness Resources

- CREW –Cascadia Region Earthquake Workgroup
- Cascadia Rising Exercise Scenario Document
- Putting Down Roots in Earthquake Country
- To access the video in this presentation -YouTube: Tectonic Earthquakes of the Pacific Northwest
- Seminar presentation by Don Ballantyne, PE on the effects earthquakes on wastewater conveyance systems (90 minutes) https://www.youtube.com/watch?v=2801aMbOEvM&feature=youtu.be or contact Allen Alston for more information

Questions?

