

Course Agenda
2022 Pendleton Public Works Training

Flood Response for Water and Wastewater Operators

Course Agenda

08:00am – 09:00am: Flood Resilience: *A Basic Guide for Water and Wastewater Utilities*; Presented by Greg Lacquement

09:00am – 09:15am: Break

09:15am – 10:15am: Basics of Water Resources: *Groundwater Hydrology*; Presented by Marilyn Lohmann

10:15am - 10:30am: Break

10:30am – 11:30am: Flood Response Plan: *Water and Wastewater Emergency Response plans for Flood Fight Procedures*; Presented by Jeff Brown

Flood Response for Water and Wastewater Operators

February 8th, 2022

Location: Pendleton Convention Center

Duration: 1.0 hrs.

CEUs: 0.1 W, 0.1 WW

Flood Resilience: *A Basic Guide for Water and Wastewater Utilities* (1hr)

Instructor: Greg Lacquement, Regulator Specialist, City of Pendleton

For the water sector, “flood resilience” refers to the ability of water and wastewater utilities to withstand a flooding event, minimize damage and rapidly recover from disruption to service. Utilities can build resilience by implementing mitigation measures. A mitigation measure can be an emergency planning activity, equipment modification/upgrade or new capital investment/construction project. Examples of mitigation measures include:

- Emergency response plan
- Barriers around key assets
- Elevated electrical equipment
- Emergency generators
- Bolted down chemical tanks

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Basics of Water Resources: *Groundwater Hydrology* (1hr)

Instructor: Marilyn Lohmann, Hydrologist, National Weather Service Pendleton

Presentation covers the fundamentals of water supply hydrology. From the hydrologic cycle to the nature and character of groundwater as it goes from recharge zones to discharge points, the basic concepts and terminology are introduced in a clear and easy form.

At the conclusion of this presentation, participants will:

- Understand the hydrologic cycle, and how it replenishes the water supply
- Understand the source, movement, and character of groundwater
- Know some of the sources of impurities in the groundwater supply
- Know the basic vocabulary of water supply hydrology

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Flood Response Plan: *Water and Wastewater Emergency Response plans for Flood Fight Procedures (1hr)*

Instructor: Jeff Brown, Public Works Superintendent, City of Pendleton

- Water Emergency Response Plan
- Wastewater Emergency Response Plan
- Water and Wastewater Operators' roles in Emergency Response
- Other City Employees' roles Emergency Response
- Review Flood Fight Supplies
- SCADA Alert @ 8,000 CFS; Response
- SCADA Alert @ 10,000 CFS; Inspect Levee and Manholes; Install closures @ SW 10th
- SCADA Alert @ 16,000 CFS; Initiate ICS System; Send Out Alert Sense Messages
- MaKay Creek Response
- Tutuilla Creek Response

BIO: Greg Lacquement

Regulatory Specialist with the City of Pendleton responsible for overall management of City Safety Program, OSHA compliance, safety trainer; 17 Year EMT, Former City Firefighter 17 years, College Course work includes, Emergency Management, Fire Service Administration, Safety Instructor, Fire Officer, Fire Instructor, Fire Inspector, Former American Heart Association CPR and AED Instructor. City Emergency Management Coordinator.

BIO: Jeff Brown

Public Works Superintendent with the City of Pendleton responsible for overall management of Construction and Repair, Streets, and Fleet Management. 25+ Years' experience in Public Works operations and management. Developed the City of Pendleton Flood Response Plan. Responsible plan administration and on-the-ground emergency coordinator and manager.

BIO: Marilyn Lohmann

Hydrologist with National Weather Service Pendleton. I received my degree in Earth Science from the University of Northern Colorado, Greeley Colorado in 1990. I have worked for the National Weather Service for 31 years, first as a weather forecaster in Norfolk, Nebraska and Elko Nevada. While in Nevada, I studied hydrology and then became the Service Hydrologist for the National Weather Service in Pendleton in 1999.