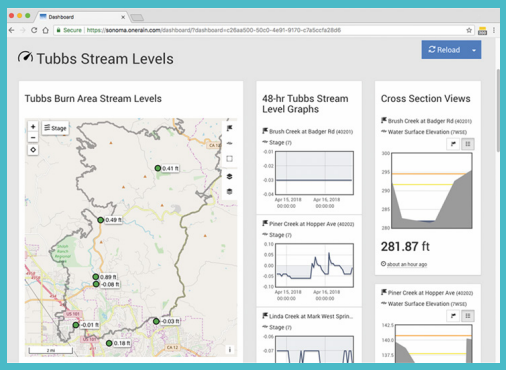
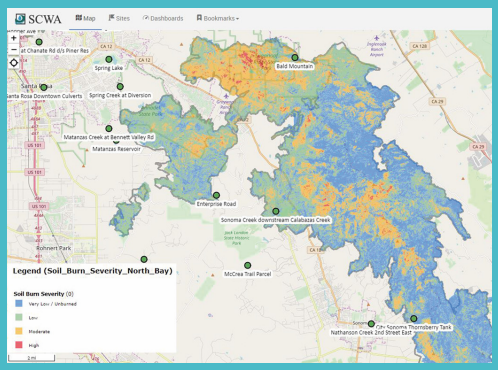
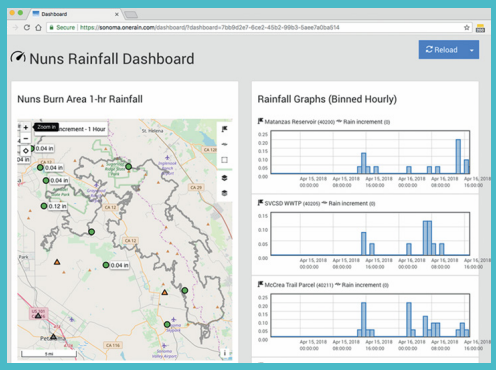
PROJECT OVERVIEW

County of Sonoma, California Flood







PROJECT STATUS

- **2018 – ongoing**

> **Sonoma County Water Agency**
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> The need on the heels of the October fires was imminent, and the pace at which we had to act was daunting. OneRain definitely stepped up to the plate to help us navigate this rapid deployment of our gauge network. Their expertise and professionalism were invaluable throughout the process.
>
> **— Jay Jasperse**
> Chief Engineer

Rapid deployment of Flood Warning System following devastating wildfires

In October 2017, the Sonoma County region experienced damaging firestorms. The resulting fire burn scars and ground conditions throughout the Tubbs and Nuns area left the region highly vulnerable to life-threatening flash flooding and debris flows during heavy rainstorms.

As they headed into the rainy season, Sonoma County and City of Santa Rosa officials knew that a flood warning network was needed as quickly as possible to assist the County and National Weather Service in detecting potential flooding conditions.

OVERVIEW

Led by Sonoma County Water Agency (SCWA) and working collaboratively with a team from OneRain and other local agencies, a plan was put in place to implement a new real-time environmental monitoring and flood warning network to measure rain and water levels at critical locations in and around the burn scars. OneRain designed and completed the new end-to-end ALERT2 Flood Warning network within four months—from conception to final implementation.

PROJECT SCOPE

26 critical site locations, within and downstream of the areas burned, were installed with ALERT2 automated streamflow and rainfall gauges. Additional soil moisture sensors track saturation in areas vulnerable to destabilization and debris flows. OneRain Contrail® software collects, processes, and disseminates the data in real time to alert City and County officials of the potential dangers during rain storms, and provides data feeds to NWS weather forecasters who are responsible for sending out alerts to residents when flash floods or debris flows may be imminent. Sensors can report new information every minute with less than 1% data loss. SCWA operates a mission-critical two-server Contrail architecture with a local onsite Contrail Base Station and OneRain cloud-hosted Contrail Server. Visit Sonoma's public website here: https://sonoma.onerain.com/