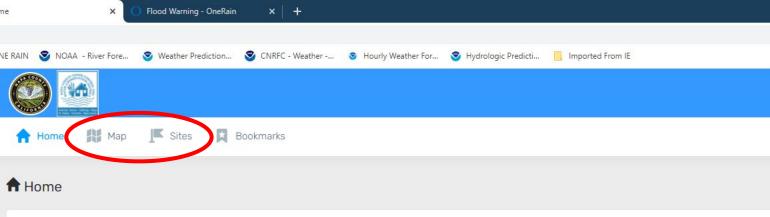
# System Overview

- District maintains an "ALERT" real-time stream and rain gauge network developed to help inform potential areas at risk of flooding. ALERT is an acronym for Automatic Local Evaluation in Real-Time.
- Network comprised of 45 stream and precipitation gauge sites:
  - 28 managed by District
  - 11 managed by City of Napa
  - 6 managed by RCD, USGS and State
- Recent transmitter upgrades funded by grants from CA DWR
- Gauge network accessible @ <a href="https://napa.onerain.com/">https://napa.onerain.com/</a> website





### https://napa.onerain.com/

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- Links to gauge sites either through map interface or list
- Navigation tool bar and hyperlinks provide links to NWS forecast for area, predicted Napa River flows, rainfall accumulation, live doppler, etc.
- Current and historical gauge data can be queried, graphed and downloaded from website for use in hydrologic models or other applications
- Ability to combined data from multiple gauge sites in order to analyze relationship between rainfall and resulting stream flow for example



### inks National Weather Service Forecast for Napa **Rainfall Summary** River and Stream Flow USGS Napa River Gage at Oak Knoll Road Rainfall Map (24 Hr accumulation) Napa River Flood Forecast (National Weather Service) Live Doppler Storm Tracker Napa County City of Napa City of St. Helena Sonoma County Rainfall and River Flow

Data

#### Napa County real-time rainfall and river-stream data network

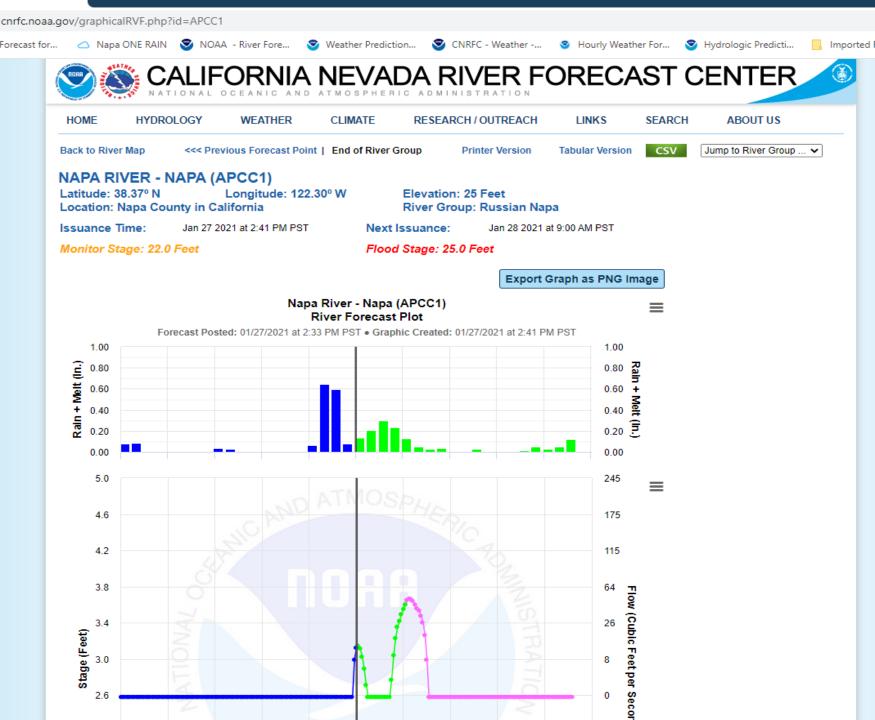
Welcome to Napa County's real-time rainfall and river-stream level monitoring website. This website provides current and historical rainfall, river and stream level monitoring data from a network of automated gage sites throughout Napa County.

The navigation toolbar and hyperlinks provide links to maps of the stream and rain gages, a list of the gage sites, and a series of dashboards, reports, and bookmarks that provide useful summaries of rain and stream data. The hyperlinks to the left offer a variety of informative resources related to weather and storms in the Napa County area. The "Map" tab provides a visual interface to find gages and data of interest throughout Napa County. Once in "Map" view, there are additional tools on the right to filter data and to add additional layers to the map. The "Sites" tab above provides an alternate way to view individual gage site information.

Napa County is responsible for maintaining this website; contact information is listed below. Data contained at this site are provisional and have not been verified for accuracy.

Napa County does not warrant the accuracy of the data and is not responsible for damages resulting from its use.



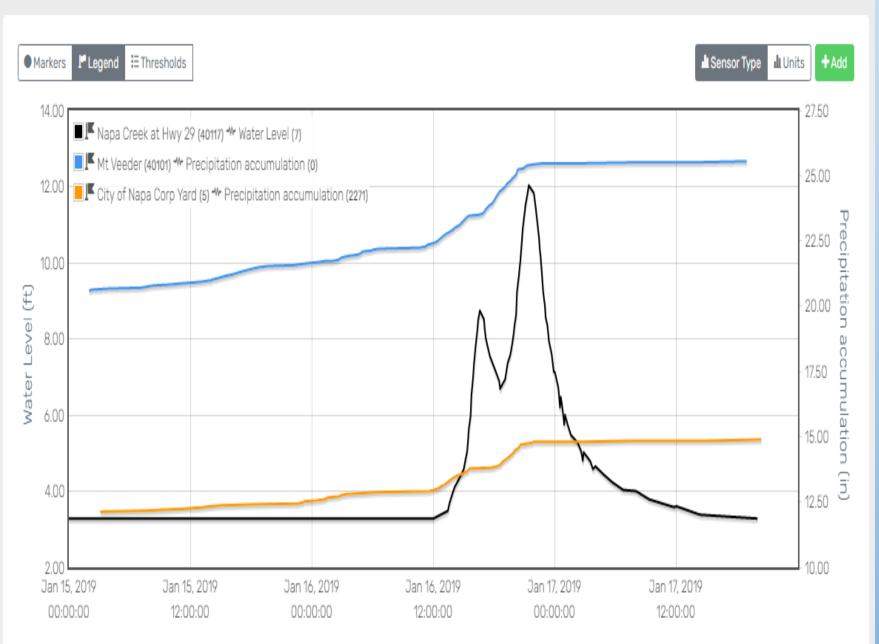


## https://napa.onerain.com/

Example hyperlink from napa.onerain.com to CRFC, one of the primary flood forecasting tools the District utilizes to determine flood operations







### https://napa.onerain.com/

Example at left shows a graph combining data from the following gauges:

- Napa Creek @ HWY 29 water level
- Mt. Veeder precipitation accumulation
- City of Napa Corp Yard precipitation

Relationship between rainfall and resulting stream flow depicted in graph help inform flood operation on bypass culvert located in City of Napa



# Future plans:

- Upgrade remaining gauges sites from ALERT 1 communication protocol to ALERT 2 protocol via additional grants
- Install redundant system in case of primary server failure
- Possible integration of Advanced Quantitative Precipitation Information (AQPI) X-band radar data feed designed to provide more precise rainfall forecasting for atmospheric rivers
- Questions?

Contact: <a href="mailto:Jeremy.sarrow@countyofnapa.org">Jeremy.sarrow@countyofnapa.org</a>; 707-259-8204

