



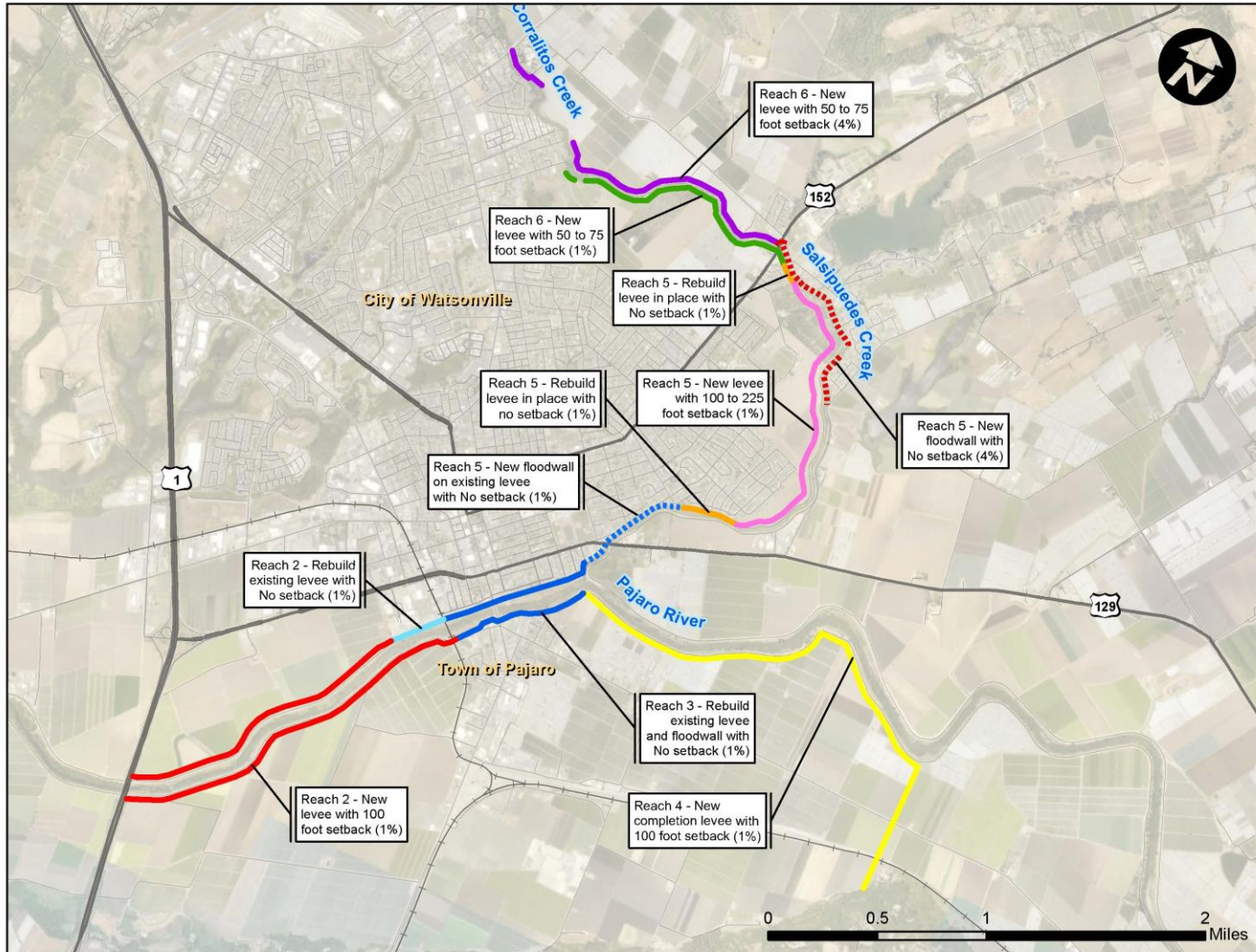


TODAY'S ACTION

- Background on Pajaro Levee
- Update following the 2022/2023 Storm Events
- Overview of recent emergency flood control activities



BACKGROUND OF LEVEE AND FUTURE IMPROVEMENTS BY PRFMA



FLOOD WARNING SYSTEM

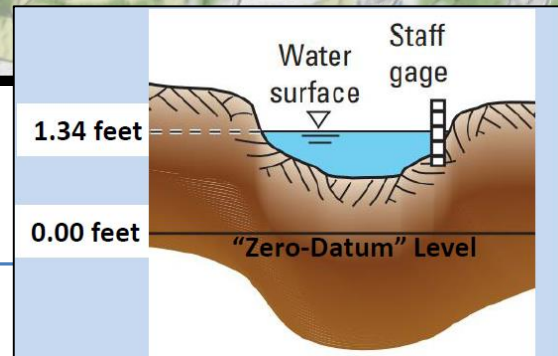
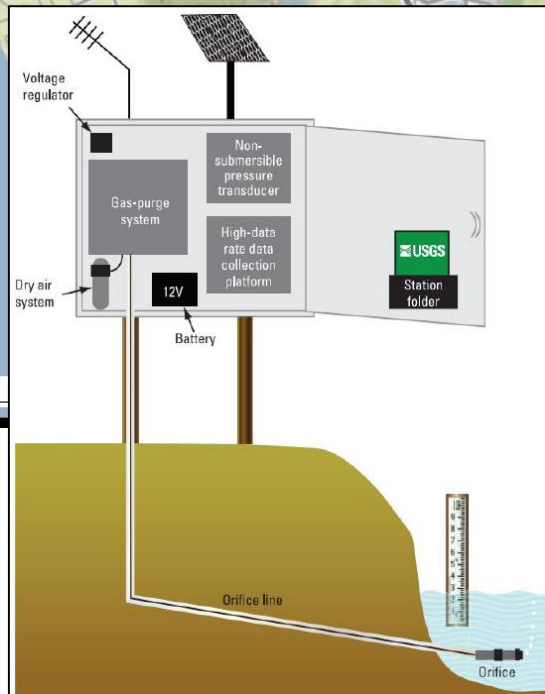
2023-01-27 15:47:11

Corralitos @ Freedom

Salsipuedes

Chittenden

Main St.



Monitor Stage: 25.0 Feet

Flood Stage: 32.0 Feet

PRODUCT NOTE: Ensemble forecasts produced by CNRFC only consider meteorological uncertainty and do not account for hydrology

Short-Range Peak Exceedance Plot

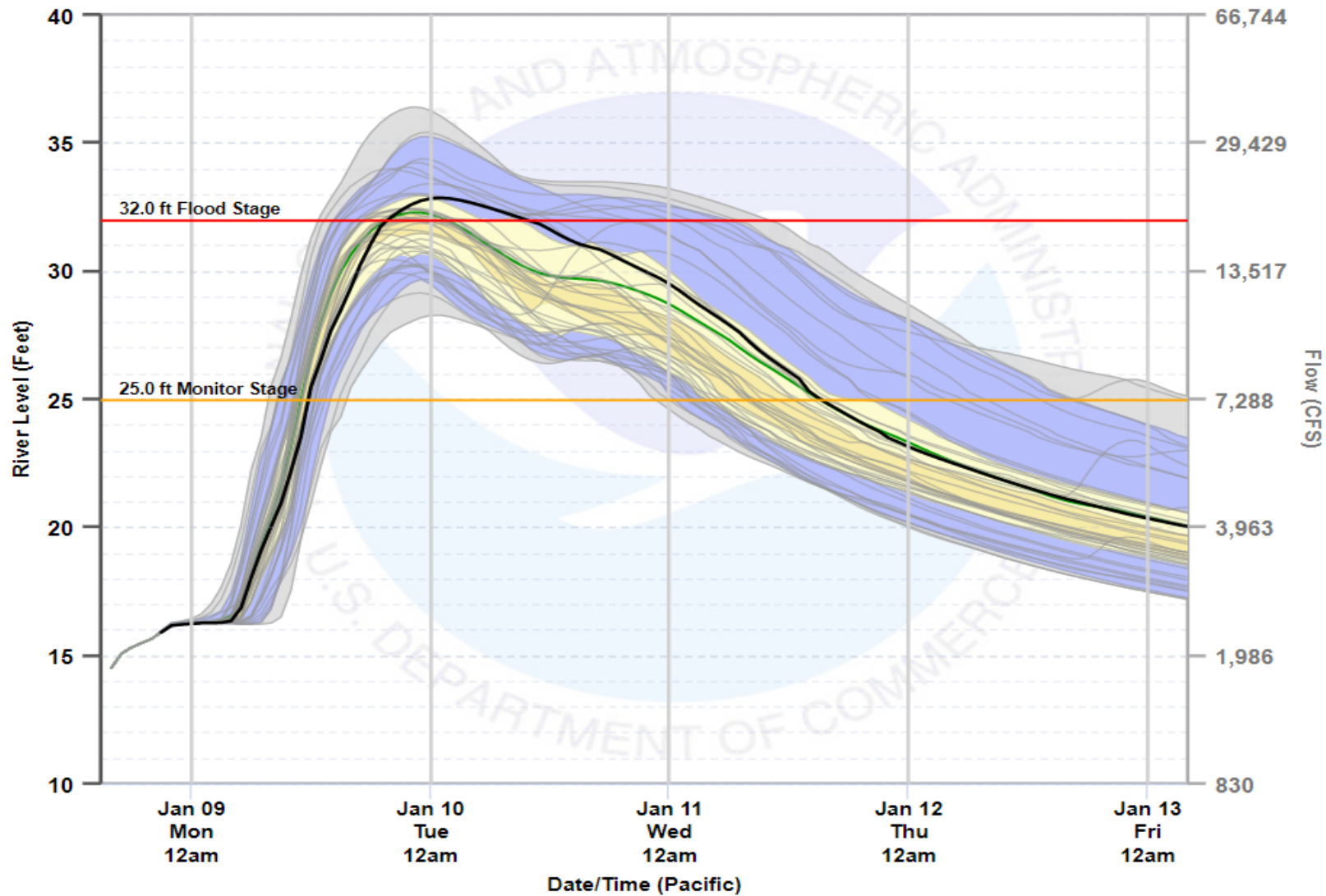
Product Information

Plot Type: Ensemble Forecast

CSV Ensemble File Download (Data)

Hourly River Level Probabilities PAJARO RIVER - CHITTENDEN (AROC1)

Created: 01/08/2023 at 9:17 PM PST



Chance of Exceedance

Forecast
01/08/2023 4 pm

Max	36
5%	35
10%	34
25%	32
50%	32
75%	30
90%	29
95%	29
Min	28

Custom T

Show: 5 Day

Export

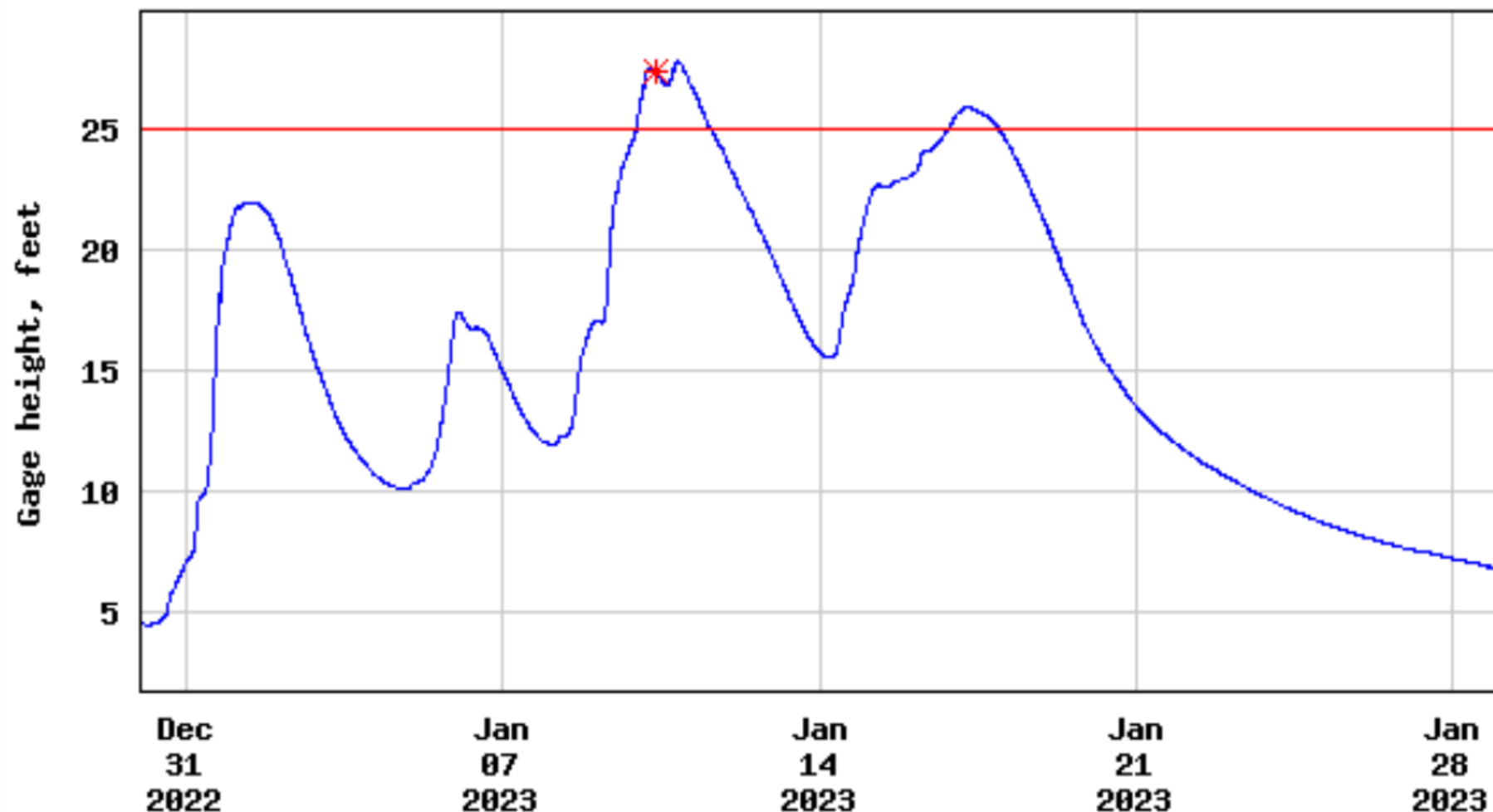
Export Char

Scale To T

- Official (Dete)
- Ensemble
- Mode
- Hourly Pro

- 0-5%
- 5-25%
- 25-40%
- 40-60%

USGS 11159000 PAJARO R A CHITTENDEN CA



---- Provisional Data Subject to Revision ----

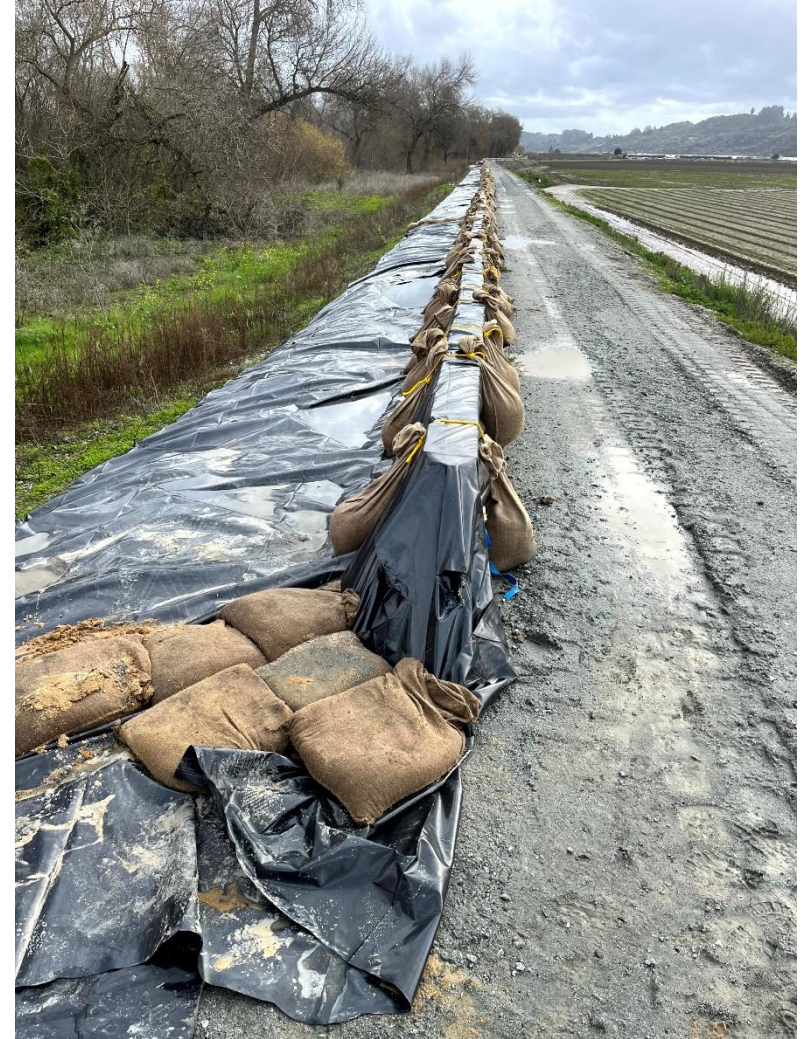
— Gage height

* Measured gage height — Monitor Stage

MCWRA PREPARATIONS

- Pajaro flood preparations based on forecasts include:
 - Installed 3,000 linear feet of floodwall
 - Repairs to levee road and banks
 - Stockpiled materials for storm response
 - Improved all-weather access to the levee
 - Identified key areas for monitoring river height during peak flows

Pajaro Levee Preventative Measures



Pajaro River Forecast Jan 8-12



HOME HYDROLOGY WEATHER CLIMATE RESEARCH / OUTREACH LINKS SEARCH ABOUT US

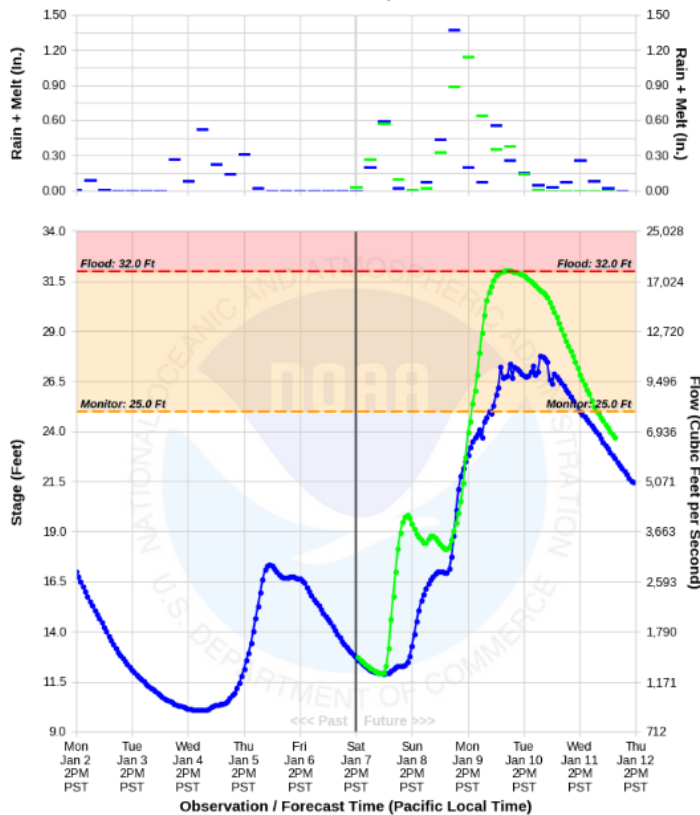
PAJARO RIVER - CHITTENDEN (AROC1)

Latitude: 36.90° N Longitude: 121.60° W Elevation: 82 Feet
 Location: Santa Cruz County in California River Group: Central Coast

Forecast	Observed	Ensemble Verification Plot
Previous Forecast	Next Forecast	
Saturday 01/07/2023 12-18 UTC	Sunday 01/08/2023 00-06 UTC	
Selected Date: Saturday 01/07/2023 18-00 UTC		

Pajaro River - Chittenden (AROC1) River Forecast Verification Plot

Forecast Posted: 01/07/2023 at 2:00 PM PST • Graphic Created: 01/12/2023 at 2:17 PM PST



- Forecasts (green line) above flood stage were predicted
- Actual river flows (blue line) peaked below the forecast
- MCWRA staff and consultants patrolled levees 24/7 to observe actual conditions
- Flows within the levee channel were at the top of the levee in some areas, during this peak event



Pajaro Levee Peak Flows – Jan 10th



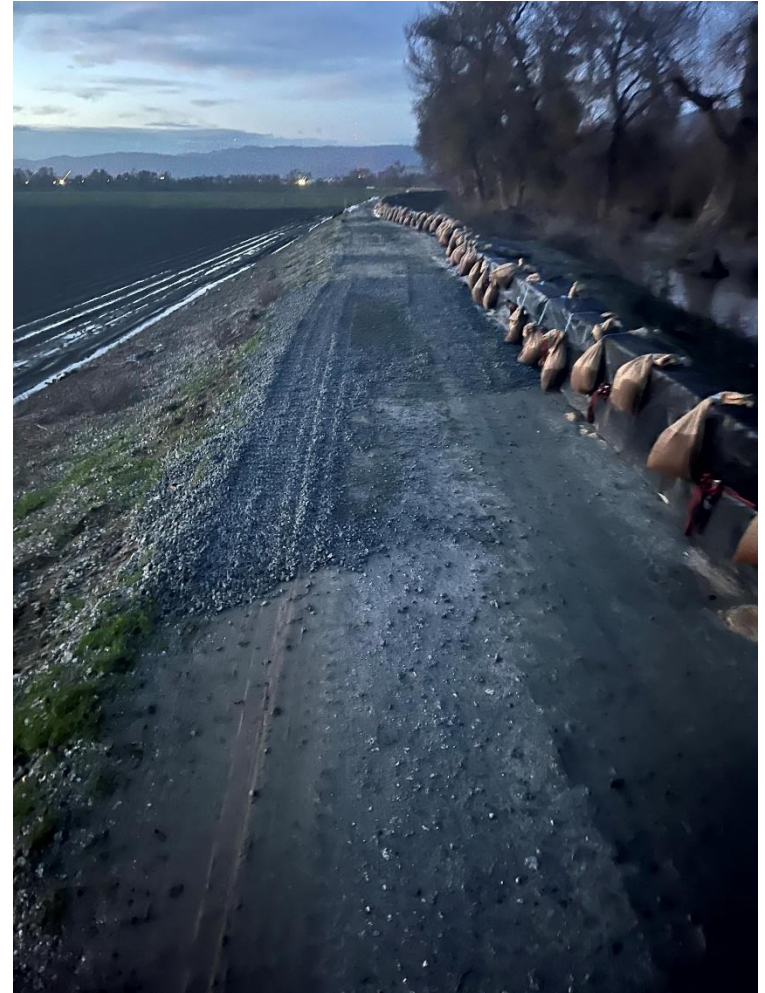
Pajaro Levee Floodfight and Repairs



Pajaro Levee Floodfight and Repairs



Pajaro Levee Floodfight and Repairs



Pajaro Levee Floodfight and Repairs



Pajaro River Forecast Jan 14-18



HOME HYDROLOGY WEATHER CLIMATE RESEARCH / OUTREACH LINKS SEARCH ABOUT US

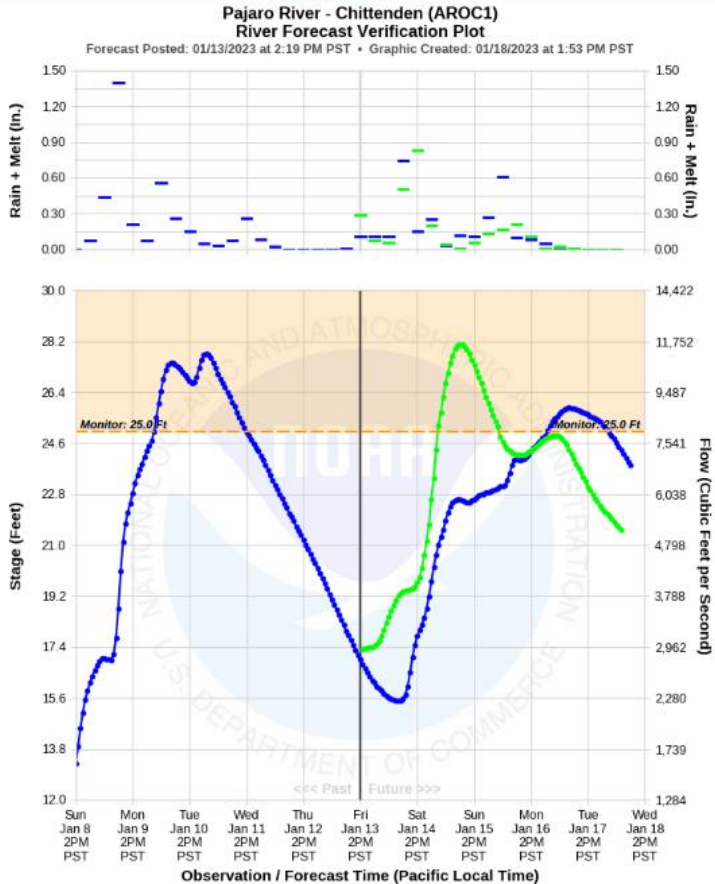
PAJARO RIVER - CHITTENDEN (AROC1)

Latitude: 36.90° N Longitude: 121.60° W Elevation: 82 Feet
 Location: Santa Cruz County in California River Group: Central Coast

Forecast Observed Ensemble Verification Plot

Previous Forecast	Next Forecast
Friday 01/13/2023 12-18 UTC	Saturday 01/14/2023 12-18 UTC

Selected Date: Friday 01/13/2023 18-00 UTC



- Forecasts (green line) were predicted to be higher than previous actual flows
- Actual river flows (blue line) peaked below the forecast
- MCWRA staff and consultants continued to patrol levees 24/7 to observe actual conditions
- Flows within the levee channel were below the top of the levee in all areas during this event

California Department of Water Resources
 NOAA / NWS / California Nevada River Forecast Center



Pajaro Levee Peak Flows – Jan 16



Summary and Next Steps

- Pajaro flood preventative measures and flood fighting kept the community safe during high peak flow events
- Thresholds for monitoring and floodstage for the Pajaro River do not reflect current conditions and should be re-evaluated by River Forecast Center to consider thresholds reflecting current flow conditions
- Longer term repairs and rehabilitation are being considered under the USACE PL 84-99 Program and evaluating efficacy of additional repairs