

# State Encourages Early Planning to Capture Winter Storm Runoff for Ground Water Recharge

California Department of Water Resources, 12/12/23

The California Department of Water Resources (DWR) is encouraging local agencies to prepare groundwater recharge projects early to maximize the capture and storage of any upcoming storm runoff to recharge groundwater basins. Groundwater provides water for millions of Californians and recharging groundwater basins not only supports overall ecosystem health, but it can also help ensure long-term sustainable groundwater supplies for communities that use groundwater for drinking water, agriculture, and business.

Last year, federal, state, and local agencies had to pivot quickly from planning for a fourth consecutive dry year, to addressing what became a historic wet year. We witnessed unprecedented collaboration, coordination, and actions to capture as much of the unexpected heavy rainfall and snow melt as possible to help reduce flood risk in vulnerable communities and recharge depleted groundwater basins. During the 2023 Water Year, more than 1.2 million acre-feet of groundwater recharge was permitted by state agencies, nearly 400,00 acre-feet of flood water was recharged using the Governor's Executive Orders, and millions more acre-feet of managed and naturally occurring recharge was achieved.

"State actions to streamline permitting and provide funding and equipment to support local agencies in 2023 were impressive, as was the work done by local agencies to expedite their projects," said Paul Gosselin, DWR Deputy Director of Sustainable Groundwater Management. "However, these efforts required a lot of quick action and put a strain on an already complicated emergency response. Going forward, DWR is working to encourage and support local agencies to proactively prepare recharge projects prior to California's wet season, including securing any needed permits."

California's new water year began October 1. Conditions so far have been mostly dry, but the strong El Niño in the Pacific could bring heavy precipitation to the state in the coming months. While forecasting technology has improved immensely, the weather extremes associated with climate change are making it difficult to know when the next deluge or next drought will occur, but we do know that both of those extremes will occur. By having groundwater recharge projects ready to go, local agencies can be prepared to capture excess water when it comes and store it in groundwater basins for use during future dry years when it is needed most.

Groundwater recharge has always been a key strategy to help improve groundwater conditions, but it wasn't until the historic passage of California's Sustainable Groundwater Management Act (SGMA) that the practice gained more statewide attention. Expediting groundwater recharge is a key water resilience strategy of the Newsom Administration's Water Supply Strategy: Adapting to a Hotter, Drier Future and is helping local agencies bring historically depleted aquifers into balance. Investing in groundwater

recharge now can help enhance water security; reduce vulnerability to floods, drought, and dry wells; and promote long-term sustainability.

December through February are typically the wettest months in California, and March and April can also be wet months. There is still time to prepare projects to take advantage of upcoming storms this year and DWR is providing technical assistance and other resources to help local agencies proactively plan and expedite groundwater recharge projects.

## California Sees Welcome Rain to Ring in Winter, After Mostly Dry Fall

Courthouse News Service, 12/18/23

After a slow start to the rainy season, California is awash in rain and snow as many prepare to travel for the coming holiday.

An atmospheric river event arrived slammed the state Sunday, complete with offshore lightning strikes around midnight. The rains triggered a flood advisory through early Monday morning in some Northern California counties including Alameda and Contra Costa.

The National Weather Service's Sacramento office reported several isolated thunderstorms early Monday. Farther north, counties near the Oregon border saw a small chance of freezing rain according to the weather service's Medford station.

The San Francisco Bay Area had received about an inch of rain as of Monday afternoon, particularly south of San Francisco toward Big Sur, meteorologist Crystal Oudit said. The weather service's Bay Area office said most of the widespread heavier rain from this morning had begun moving east and will cause shattered showers in many regions of the north state into the evening.

More rain will arrive Tuesday and Wednesday mornings, possibly lasting through Wednesday evening. The Sacramento weather office also predicted some isolated thunderstorms and snow at high elevations through Wednesday. Oudit said her office expects between one to three inches of rain to fall across the Bay Area by Wednesday night, particularly in the coastal mountain ranges.

About half of the Sacramento Valley could see at least three inches of rain this week. Although the weather system is relatively warm, snow is expected to fall at 7,500 to 8,000 feet, with at least a 50% chance of more than four inches. The heaviest snowfall could be seen near Lassen Peak, and snow could drop down to 6,500 feet by Wednesday.

"Furthermore, a 15 to 25% chance for isolated thunderstorms will remain possible through Tuesday," Sacramento meteorologists said in a Monday discussion. "This is the result of increasing moisture to the region, amidst a fairly mild temperatures regime, leading to some weak instability. With any thunderstorms that do develop, gusty winds, brief heavy rainfall and small hail will be the primary hazards."

For those planning to travel across the state by car over the holidays, Oudit said Californians should watch out for roadway flash flooding — particularly during periods of sudden, heavy rainfall.

After years of drought, California entered the water year drought free. Several late-season storms helped improve the state's soil moisture, as did lower temperatures, higher humidity and more cloud cover this year.

Scientists say they are cautiously optimistic that there could be a slightly wetter winter in the state's outlook this year given the formation of strong El Niño conditions, but it is very difficult to predict atmospheric river events and their timing. A rain system expected in mid-November proved to be very light, and December has been trending seasonally dry up to this point, Oudit said.