

## ASSEMBLY THIRD READING

AB 277 (Rodriguez)

As Amended May 18, 2023

Majority vote

**SUMMARY**

Codifies the State-Federal Flood Operations Center (FOC) in the Department of Water Resources (DWR) and tasks it with submitting a report regarding forecasting to the Legislature.

**Major Provisions**

- 1) Establishes that the purpose of the FOC is to function as a focal point for the collection, analysis, and dissemination of flood and water-related information.
- 2) Requires that the FOC and the California Office of Emergency Services (Cal OES), with the cooperating agencies, develop and submit a report to the Legislature that outlines necessary technological advancements for agile forecasting and identifies gaps in data, underserved regions, and strategies for improving communication and emergency response. Cooperating agencies include the U.S. Bureau of Reclamation, the State Water Project, the Central Valley Flood Protection Board, Cal OES, and the Department of Insurance.

**COMMENTS**

*Equity Impact:* According to the author's staff, "since disasters have a disproportionate impact on vulnerable individuals and communities, this bill seeks to mitigate risks posed by extreme atmospheric river (AR) incidents and make communities more resilient.

*Recent Floods:* California has experienced destructive flood events throughout its history. Before January 2023, the last major and widespread flooding event was 1997 (the New Year's Day floods, when 120,000 people were evacuated and 23,000 homes and businesses flooded). More recently, local flood disasters include the Oroville Spillway in 2017 and the Russian River floods in 2019. Even before the floods in 2023, every county in California has been declared a federal disaster area for a flooding event at least once over the last 30 years.

A recent study by researchers at the Center for Western Weather and Water Extremes housed at Scripps examined the February 2017 AR event that contributed to the Oroville crisis and found that "California's reliance on precipitation from [ARs] is expected to increase as our climate warms." Similarly, research published in August 2022 ("ARkFuture") shows how climate change is leading to more extreme AR events. ARkFuture models a 30-day "megastorm" event in which "[a]tmospheric rivers are the primary storm mode" causing extremely high precipitation and associated runoff that is two to four times higher than historical averages. Such an event would result in a "megaflood." Better modeling and forecasting could help to mitigate the risks associated with such an event.

The FOC is responsible for coordinating local, state, and federal flood operations year-round. The FOC is housed within DWR's Division of Flood Management and is the facility from which DWR centrally coordinates emergency response statewide. When activated during a major weather event, the FOC operates 24 hours a day in coordination with the National Weather Service to monitor changing conditions, coordinate flood flight efforts with local and federal

partners, and keep the public informed. DWR also coordinates closely with Cal OES when emergency operation centers are activated during a flood or other emergency.

### **According to the Author**

The recent series of atmospheric rivers brought unanticipated devastation across California and has led to multiple fatalities. In response to the storms, over 40 counties proclaimed a local emergency. Subsequently, the Governor declared a state of emergency and ultimately requested a major disaster declaration from the President to provide federal assistance to communities and individuals who suffered damages. Clearly, California would benefit from more accurate forecasts to determine the extent to which extreme weather events, such as atmospheric rivers and extended periods of extreme heat would result in significant damages or disruptions to lifeline infrastructure systems.

Earlier this year, the Committee on Emergency Management, the Committee on Water, Parks and Wildlife, and the Committee on Utilities and Energy Committee, convened a joint oversight hearing to evaluate California's preparedness for extreme atmospheric river incidents. The hearing was an opportunity to hear from the leading climate scientists and researchers on what type of incidents our emergency managers should be prepared for and how the State could improve local forecast models to more accurately predict local impacts and the need to quickly warn residents of any danger from flooding or extended power outages. The ultimate goal of this bill is identifying ways to improve California's forecasting capabilities and provide state and local emergency management with the information they need to prepare for these extreme atmospheric river incidents.

### **Arguments in Support**

Sonoma Water writes in support, "Sonoma Water, along with local, state, and federal partners, has been at the forefront of resilience efforts to atmospheric rivers and extreme precipitation events. We have been the test bed for Forecast Informed Reservoir Operations (FIRO), which we have proven to be a viable new method for timing releases from reservoirs based on the latest forecasting technology and modeling. We have also led the implementation of a DWR grant placing a system of five x-band radars and one c-band radar throughout the Bay Area to increase our forecasting capabilities and improve our understanding of where and at what intensity precipitation will fall. This system is known as Advanced Quantitative Precipitation Information (AQPI) that has a goal of improving emergency responses to intense storms. Both FIRO and AQPI are pushing to enhance our ability to forecast, predict, and understand extreme precipitation events so that we can be better prepared to mitigate their devastating impacts. What we have learned is that more information is critical, and disseminating that information to emergency responders can decrease loss of life and property value."

### **Arguments in Opposition**

None on file.

## **FISCAL COMMENTS**

According to the Assembly Committee on Appropriations, "Ongoing General Fund (GF) cost pressures of approximately \$6 million to DWR to codify the FOC's existing operations, as such funding would no longer be available to DWR to use for another purpose. Additionally, DWR notes one-time GF cost pressures of approximately \$1.3 million per week in years when the FOC is activated for flood conditions. For example, this year, DWR anticipates the FOC will be active through July, for a total of 24 weeks in 2023, at a cost of approximately \$32 million. Minor and

absorbable costs to OES to lead the report with the FOC, and to cooperating agencies to consult on the report with FOC and OES."

**VOTES****ASM EMERGENCY MANAGEMENT: 7-0-0**

**YES:** Rodriguez, Waldron, Aguiar-Curry, Alvarez, Calderon, Megan Dahle, Schiavo

**ASM WATER, PARKS, AND WILDLIFE: 15-0-0**

**YES:** Bauer-Kahan, Mathis, Alanis, Bennett, Megan Dahle, Davies, Friedman, Hart, Kalra, Pellerin, Blanca Rubio, Schiavo, Villapudua, Ward, Weber

**ASM APPROPRIATIONS: 11-0-5**

**YES:** Holden, Bryan, Calderon, Wendy Carrillo, Mike Fong, Hart, Lowenthal, Papan, Pellerin, Weber, Ortega

**ABS, ABST OR NV:** Megan Dahle, Dixon, Mathis, Robert Rivas, Sanchez

**UPDATED**

VERSION: May 18, 2023

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