COUNTY OF SAN MATEO
DEPARTMENT OF EMERGENCY MANAGEMENT

Emergency Services Council Meeting

****IN-PERSON WITH REMOTE PUBLIC PARTICIPATION AVAILABLE****

October 29, 2026 5:30PM – 7:00PM

Regional Operations Center
501 Winslow Street, Redwood City CA 94063

Join Zoom Meeting
https://smcgov.zoom.us/j/87805774066?pwd=DealrNXqpGfZnbiidzGpj1kSFCQg5v.1
Meeting ID: 878 0577 4066
Passcode: 6503634790

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AGENDA

1)	Roll Call (3 minutes)	Chair
2)	Public Comments, Correspondence (Clerk), Announcements (2 minutes)	Clerk
3)	Action to Set Agenda and Approve July 30, 2026 Meeting Minutes (5 minutes)	Chair
4)	HazMat Vehicle Procurement Update (5 minutes)	Director
5)	El Niño Readiness (55 minutes)	Guests
6)	Director's Year in Review (15 minutes)	Director
7)	Report Outs Related to Emergency Services Council and 2027 Calendar Review (5 minutes)	Chair & Members
8)	Adjournment	Chair

Meetings are accessible to people with disabilities. Individuals who need special assistance or a disability-related modification or accommodation (including auxiliary aids or services) to participate in this meeting, or who have a disability and wish to request an alternative format for the agenda, meeting notice, agenda packet or other writings that may be distributed at the meeting, should contact the Agenda Administrator of the Emergency Services Council at least 2 working days before the meeting at (650) 363-4790 and/or DEM_Info@smcgov.org. Notification in advance of the meeting will enable the County to make reasonable arrangements to ensure accessibility to this meeting and the materials related to it. Attendees to this meeting are reminded that other attendees may be sensitive to various chemical-based products.

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COUNTY OF SAN MATEO
DEPARTMENT OF EMERGENCY MANAGEMENT

Emergency Services Council Committee Meeting Minutes

July 30, 2026

This meeting was called to order at 5:30 PM by Chair Mueller.

I. Roll Call

Atherton	Council Member Widmer	Present
Belmont	Council Member McCune	Present
Brisbane	Council Member Lentz	Present
Burlingame	Council Member Pappajohn	Present
Colma	Council Member Slaughter	Present
Daly City	Council Member Sylvester	Present
East Palo Alto	Council Member Barragan	Not Present
Foster City	Council Member Niederhofer	Present
Half Moon Bay	Council Member Jonsson	Present
Hillsborough	Council Member Chuang	Present
Menlo Park	Council Member Combs	Not Present
Millbrae	Council Member Rainaldi	Present
Pacifica	Council Member Boles	Present
Portola Valley	Council Member Hufty	Present
Redwood City	Council Member Eakin	Present
San Bruno	Council Vice Chair Medina	Present
San Carlos	Council Member Dugan	Present
San Mateo	Council Member Newsom	Not Present
South San Francisco	Council Member Flores	Present
Woodside	Council Member Goeld	Present
County of San Mateo	Council Chair Mueller	Present

Attending County Representatives:

- Deputy County Executive Calderon, County Executive's Office
- Director Dhapodkar, Department of Emergency Management
- Assistant Director Reynolds, Department of Emergency Management
- Clerk of the Committee Corteway, Department of Emergency Management
- Secretary of the Committee Haddad, Department of Emergency Management

II. Public Comments, Correspondence, and Announcements

- No public comments or announcements.

III. Action to Set Agenda and Approve April 30, 2026 Meeting Minutes

- Millbrae Council Member made the recommendation to approve the January 29, 2026, meeting minutes, and the Hillsborough Council Member seconded. The meeting minutes were unanimously approved.

IV. Wildfire Season Outlook & Countywide Mitigation Efforts

- Director Dhapodkar provided an overview of the California Fire Safe Council and the coordination significant wildfire mitigation efforts underway across the County to reduce wildfire risk and strengthen community resilience.
- Director Dhapodkar noted that San Mateo County residents consistently identify wildfire as a top risk. She recognized the work of multi-jurisdictional partners implementing risk-reduction projects and introduced panelists to provide an overview of their ongoing wildfire mitigation work.

Cal Fire – Santa Cruz Unit

- San Mateo County Fire Chief Wilson provided an overview of the wildfire outlook, resources, and Cal Fire's fire mitigation efforts, including updated helicopters capabilities, the opening of Cal Fire's Camp Glenwood, and regular evacuation exercises in coordination with law partners.
- Since 2024, Cal Fire has removed and thinned more than 115 acres of vegetation and conducted prescribed burns on 215 acres of land to support fuel reduction.
- Chief Wilson underlined the importance of public preparedness education, including signing up for SMC Alert, maintaining go-bags, clearly addressing homes, creating defensible space, hardening homes, and maintaining evacuation routes. Chief Wilson affirmed San Mateo County is not immune to fires, pointing to the CZU example.
- Camp Glenwood is staffed with two crews for nine months of the year and supports an adult education and career training partnership with the San Mateo County Office of Education.
- Cal Fire recently deployed a team and resources to Washington state to respond to wildfires.

San Mateo Resource Conservation District (RCD)

- RCD is a special district with the mission to help people help the land. RCD works with landowners to connect the dots, secure grant funding, and implement conservation programming. RCD is largely grant funded. Since 2019, RCD has received $25 million in grants, including $18 million from Cal Fire.
- RCD explained that vegetation treatments break up dense forests and create horizontal and vertical separation, making wildfires safer and easier to manage.
- RCD affirmed it is open to working with all partners, as relationship building is critical to addressing wildfire and environmental risks.

- RCD identified San Bruno Mountain wildfire mitigation as a regional priority and is pursuing funding for two fuel-reduction projects benefiting South San Francisco, Brisbane, Daly City, and Colma.

Midpeninsula Regional Open Space

- Midpeninsula Regional Open Space manages 36,000 acres in San Mateo County, including 150 miles of fire and emergency access routes and more than 100 structures. Maintaining emergency access is a key priority, as demonstrated during the CZU Fires. Midpeninsula Open Space hosts two resource management crews and conducts environmentally sensitive work.
- Midpeninsula Regional Open Space explained that forest resilience work balances fuel reduction with ecological restoration by pruning trees, clearing brush, and managing invasive species while protecting native vegetation. The agency emphasized the need for forest restoration alongside fuel reduction.
- Midpeninsula Open Space highlighted the criticality of partnerships for effective fire mitigation and management work, including grants from Cal Fire. The agency affirmed that in the county's regional landscape, the variety of fire mitigation partners all bring different strengths.

San Francisco Public Utilities Commission (SFPUC)

- SFPUC identified partnerships and multi-jurisdictional collaboration as a top priority for wildfire mitigation, with a focus on coordinating projects across jurisdictional boundaries.
- SFPUC emphasized the importance of building relationships, coordinating communications, and establishing community trust before an emergency occurs.

Caltrans

- Since 2020, Caltrans has increased funding for fuel reduction and vegetation management, using in-house crews and service contracts to maintain roadside clearance in fire severity zones and reduce highway fire risk.
- Caltrans has prioritized partnerships and community outreach to develop vegetation management plans along highways that cross multiple jurisdictions and landscapes.

Pacific Gas & Electric (PG&E)

- PG&E highlighted its wildfire mitigation efforts, including undergrounding and covering power lines, vegetation management, and tree trimming near power lines.
- PG&E created a dedicated position to strengthen vegetation management coordination with cities and local and state agencies.
- PG&E explained that enhanced powerlines automatically de-energize when contacted by a tree branch or other object, reducing the risk of ignition.
- Chair Mueller commended the agencies for their fire mitigation work and expressed appreciation for their partnerships with his office. Chair Mueller highlighted Camp Glenwood, PG&E's progress on undergrounding power lines, and Caltrans' fuel-reduction projects as significant improvements to wildfire prevention in the County.

V. HazMat Program Update

- Assistant Director Reynolds updated the ESC on the status of the county's HazMat replacement planning. The county is serviced by one primary HazMat response truck that is aging out and needs to be replaced. A new HazMat vehicle will cost an estimated $2 million and take 47 months to build.
- The ESC considered two funding options for vehicle replacement over FY 2027–2030: Option A, maintaining a $50,000 Trust Fund balance with an estimated annual ESC member budget allocation of 2.7% to close funding gaps, and Option C, maintaining a $50,000 balance with an estimated 3.7% annual budget increase for all ESC members.
- Hillsborough moved to approve Option A, seconded by Colma. The motion passed unanimously, with San Carlos abstaining.

VI. Severe Winter Storm Readiness

- Emergency Management Coordinator McCall provided an overview of severe winter weather. The National Oceanic and Atmospheric Administration (NOAA) Climate Prediction Center forecasts an 81% chance of a very strong El Niño from October through December 2026 and a 97% chance that El Niño conditions will persist through early spring 2027. This could result in above-normal rainfall in the Bay Area.
- Coordinator McCall emphasized that SMC EM is taking severe winter weather seriously and has increased monitoring. SMC EM will bring experts to the October ESC meeting to provide additional updates.
- Coordinator McCall recommended three approaches to winter storm readiness. First, residents should prioritize basic personal mitigation measures, including clearing drains and gutters, obtaining sandbags if their property has a history of flooding, and ensuring adequate property drainage. Second, cities should coordinate with internal stakeholders, identify flood-prone areas, and share preparedness actions with their communities. Third, residents should register for SMC Alert to receive emergency information.
- Director Dhapodkar stated that SMC EM raises winter storm readiness with stakeholders annually and has begun these conversations earlier each year. She confirmed that SMC EM will host coordination calls with cities to discuss preparedness activities and distribute a communications toolkit for cities to inform residents on mitigation measures. Director Dhapodkar also confirmed that SMC EM will distribute information ahead of storms and host operational areas coordination calls as needed.
- Chair Mueller inquired about the status of dams in the county and emphasized the importance of sandbags for flood mitigation. Deputy County Executive Calderon confirmed that the County has already ordered 75,000 sandbags, an increase from its annual order of 60,000. Director Dhapodkar clarified that County-purchased sandbags are intended for unincorporated areas but may be provided to cities during an emergency, as was done for Portola Valley last year.
- The Brisbane Council Member asked whether the County could coordinate bulk sandbag procurement for cities that may not place orders in time. Director Dhapodkar stated that she will discuss winter weather readiness and sandbag procurement with city emergency managers.

VII. Report Outs Related to Emergency Services Council

- Director Dhapodkar clarified that the County will cover half of the cost of the new HazMat vehicle, with cities' contributions calculated based on population and tax roll data.

VIII. Adjournment

- Chair Mueller adjourned the meeting at 7:02 PM.

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COUNTY OF SAN MATEO
EMERGENCY
MANAGEMENT

Dr. Shruti Dhapodkar
Director

County Government Center
501 Winslow Street
Redwood City, CA 94063
(650) 363-4790
www.smcgov.org/dem

Date:	**October 29, 2026**
To:	**Emergency Services Council (ESC)**
Cc:	**Nicholas Calderon, Deputy County Executive**
From:	**Dr. Shruti Dhapodkar, Director**
Subject:	**HazMat Vehicle Procurement Update**

San Mateo County Emergency Management (SMC EM) has continued to advance the procurement of a Type 1 Hazardous Materials (HazMat) Response Vehicle following the ESC's authorization to proceed with the procurement process.

County Procurement has approved the use of a Sourcewell cooperative purchasing agreement for this acquisition. Design work with Golden State Fire Apparatus is approximately 90% complete. Final pricing will be confirmed once the design is finalized and is still expected to be in the $2 million range.

Once the design is complete, the vehicle specifications will undergo peer review by regional HazMat teams to confirm operational suitability, Type 1 capabilities, and alignment with countywide response needs.

SMC EM plans to present the final staff report and request purchase authorization from the San Mateo County Board of Supervisors on December 1, 2026. SMC EM will continue coordinating with County Procurement, Golden State Fire Apparatus, and regional HazMat partners to complete the procurement process and ensure the vehicle meets the County's operational needs.

The current ESC trust fund and budget balances support a pre-payment option that will secure a price discount. When the vehicle purchase price is finalized, SMC EM will negotiate for the largest discount supported by budget balances at the time of purchase.

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Date:	**October 29, 2026**
To:	**Emergency Services Council (ESC)**
Cc:	**Nicholas Calderon, Deputy County Executive**
From:	**Dr. Shruti Dhapodkar, Director**
Subject:	**El Niño Readiness**

1. El Niño Impacts – The National Oceanic and Atmospheric Administration's (NOAA) Climate Prediction Center gives an 83% chance of a record-strength El Niño this winter. NOAA notes that a stronger event raises the odds of impacts but does not guarantee them. San Mateo County Emergency Management (SMC EM) is planning around two separate flood risks.

- **Higher water on the coast and Bay -** Since October 1, high tides at the San Francisco and Redwood City gauges have run about a foot above what would be normally expected. The attached Tide Days of Concern Chart shows the dates to watch, including the first King Tide window in late November.
- **Heavy rain -** Global seasonal models lean strongly toward a wetter than normal winter, including the Bay Area. The models cannot predict when individual storms will arrive or how strong they will be.

When a storm arrives during a high tide, the two hazards compound and impacts can be greater than either would cause alone.

2. Proclamation and Task Force. On October 20, the San Mateo County Board of Supervisors proclaimed a local emergency in anticipation of El Niño and authorized the creation of an El Niño Task Force. This action supports planning and preparedness only. It includes no supplemental funding and places no requirements on cities and towns. The Task Force sets up a shared coordination structure, so county and city partners will work together before the storms arrive. Cities and towns maintain full responsibility for their own preparedness activities. A preparedness proclamation does not replace an incident proclamation. If a damaging storm occurs, the County and affected cities may need to proclaim a local emergency for that specific incident to be eligible for state and federal disaster recovery assistance programs.

For public communication and outreach, SMC EM launched the County El Niño Readiness webpage and started a monthly coordination call for Operational Area partners on October 21. SMC EM has also distributed a social media toolkit in English, with Spanish, Simplified Chinese and Tagalog versions coming soon. The Compass Forum on October 28 featured a conversation on El Niño between Dr. Marty Ralph, Director of the Center for Western Weather and Water Extremes (CW3E) at Scripps Institution of Oceanography, and seasoned Standford Emergency Manager Director, Chris Godley. The first half of the session connected the latest forecast science with practical lessons from past storm seasons, giving attendees a clearer understanding of what this winter may bring and how forecasts can guide earlier, better-informed decisions. The second half of the session focused on communicating weather risk clearly and consistently, and attendees came away with practical ways to share forecast information with partners and the public.

3. CW3E Partnership. SMC EM is partnering with CW3E on the Atmospheric River Emergency System (ARES). ARES gives SMC EM direct access to CW3E's data and expertise, allowing the creation and development of tools that are carefully tailored to San Mateo County's needs and deliver greater decision-making ability. Through ARES, SMC EM leadership holds regular calls with CW3E meteorologists and El Niño experts. The County also has access to the Advanced Quantitative Precipitation Information (AQPI) system, operated by CW3E, which brings radar, rainfall forecasts, and storm data into our situational awareness tools. Together, these resources fill gaps in the weather information available to the County and give partners a clearer picture of current conditions, especially on the coast, where rain gauges are scarce. Dr. Marty Ralph will provide remarks and a technical briefing at today's meeting.

4. Half Moon Bay. Todd Seeley, Public Works Superintendent for the City of Half Moon Bay, will present the City's winter preparations. Half Moon Bay's work reflects what many cities and towns across San Mateo County are doing this fall, and it highlights the key actions and relationships needed to operate effectively through the coming winter season.

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Date:	**October 29, 2026**
To:	**Emergency Services Council (ESC)**
Cc:	**Nicholas Calderon, Deputy County Executive**
From:	**Dr. Shruti Dhapodkar, Director**
Subject:	**Director's Year in Review**

In 2026, San Mateo County Emergency Management (SMC EM) continued turning strategy into action by strengthening regional coordination, advancing community preparedness, and improving emergency communications.

SMC EM supported 33 response activities, conducted 57 community outreach and education events, delivered 31 trainings and exercises and supported 34 alert and warning functions. These efforts strengthened emergency readiness and response capabilities across San Mateo County. Through community events, engagement with Community-Based Organizations (CBO), and the Community Resilience Survey, SMC EM continues to listen to residents and translate their feedback into action. The survey highlighted the need for household and individual preparedness planning, earthquake mitigation, and family evacuation planning. SMC EM is incorporating these priorities into community outreach, educational materials, hazard mitigation, and evacuation planning.

SMC EM continues working with its regional partners to strengthen emergency communications through ongoing training for alert issuers and public informational officers. Our shared commitment to One County, One Voice supports clear, consistent, and coordinated information for residents during emergencies.

SMC EM remains committed to working collaboratively with the ESC and its member jurisdictions to strengthen regional preparedness and community resilience. SMC EM is grateful to the ESC for their ongoing support.

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Emergency Services Council Meeting

October 29, 2026



Agenda

01 **Roll Call**
Chair

02 **Public Comments, Correspondence, Announcements**
Clerk

03 **Action to Set Agenda and Approve July 30, 2026 Meeting Minutes**
Chair

04 **HazMat Vehicle Procurement Update**
Director

05 **El Niño Readiness**
Guests

06 **Director's Year in Review**
Director

07 **Report Outs Related to Emergency Services Council and 2027 Calendar Review**
Chair & Members

08 **Adjournment**
Chair

01

Roll Call

Chair

02

Public Comments, Correspondence, Announcements

Clerk

03

Action to Set Agenda & Approve July 30, 2026 Meeting Minutes

Chair

04

HazMat Vehicle Procurement Update

Director

05

El Niño Readiness

Guests

El Niño & the Seasonal Outlook

WHAT WE SHARED IN JULY

81% chance of a very strong El Niño

WHERE WE ARE NOW

Strength is no longer the question. Is it a record?

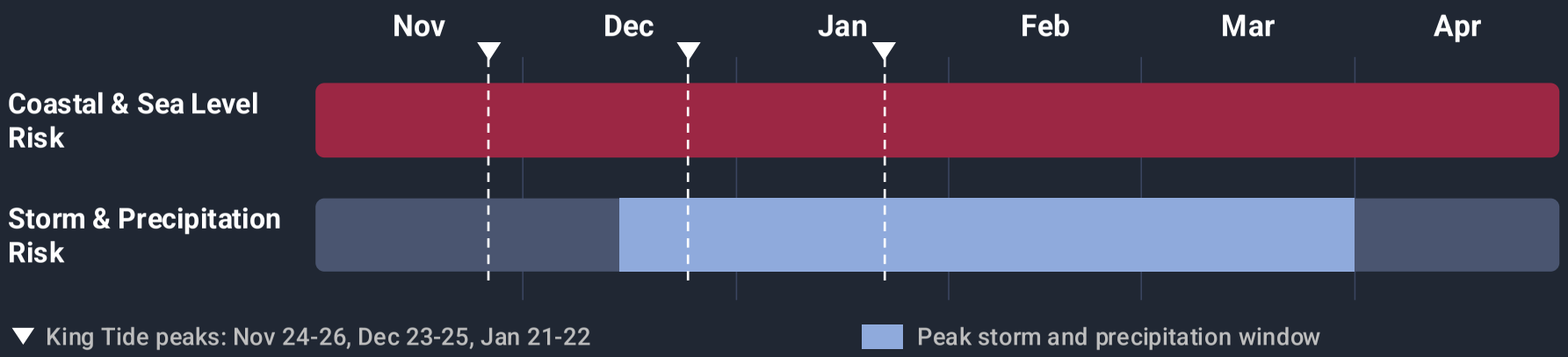
83%

chance this becomes the strongest El Niño since records began in 1950 (October to December 2026)

With an event this size, El Niño impacts are more likely, though not guaranteed.
Exact totals, timing, and storm tracks are not yet known.

Seasonal Timeline

Two separate flood risks, both running through spring 2027



Season Length: The season runs through April 2027.
Beyond NOAA: We are seeing more models point toward a wetter winter, particularly January through March.

How We Track It: Countywide Tide Monitoring

How SMC EM tracks high tides and communicates bay and coastal flood risk to our partners

Predicted high tides at the San Francisco gauge of 6 ft or more this season

King Tide: tide 7 ft or higher (7 days) **Elevated Tide:** tide 6 to 7 ft (61 days) 8-day window around a 7+ ft King Tide

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Oct 2026	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Nov 2026	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Dec 2026	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Jan 2027	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Feb 2027	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			
Mar 2027	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Apr 2027	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	

Three 8-day windows have elevated tides: Nov 21 to 28, Dec 20 to 27, Jan 17 to 24. A storm in these windows would be concerning.

SAN FRANCISCO GAUGE RECORD

8.7 ft

Highest water level ever recorded, Jan 27, 1983

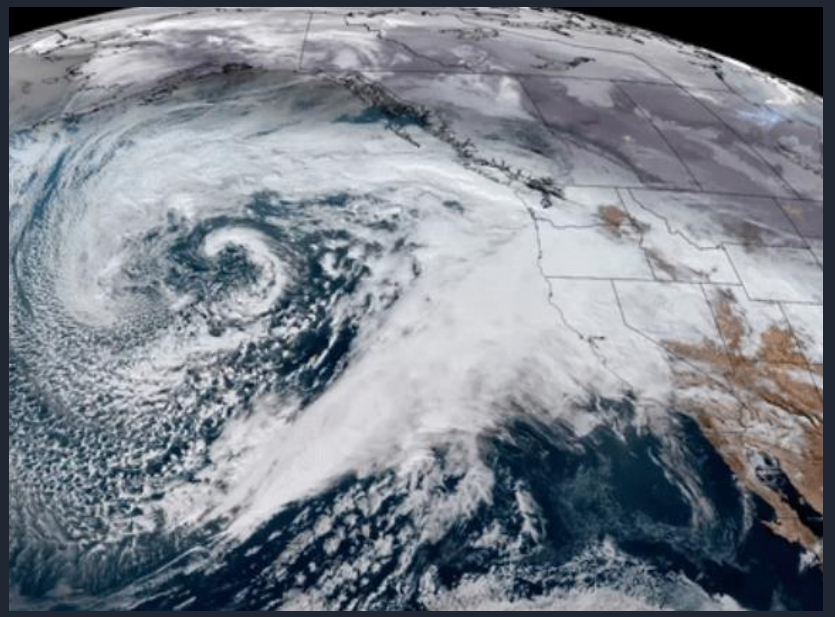
Storm surge: the extra water a storm adds on top of the tide

Storm size	Surge added
Decent-size storm	About 0.5 to 1.5 ft
Strong El Niño storm	about 2 ft
Very large storm	3 ft or more

Source: California Coastal Commission. Note: these are conservative estimates.

Proclamation & El Niño Task Force

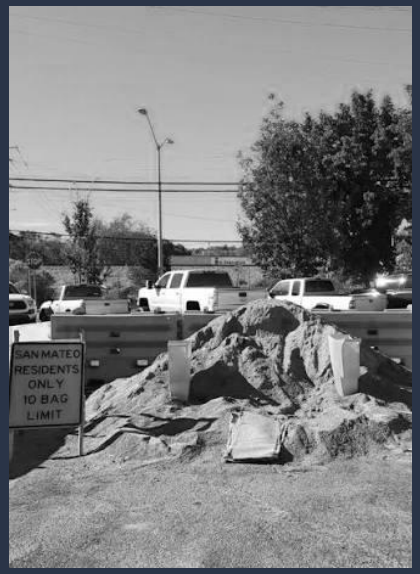
1. Proclaimed October 20
2. Planning and preparedness
3. A shared coordination structure
4. Does not replace an incident proclamation



El Niño Readiness Stories

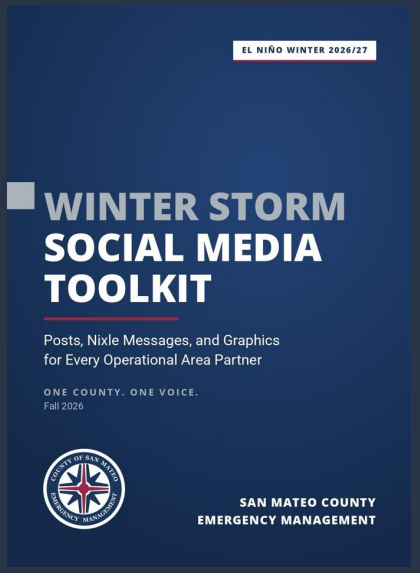
Public Works

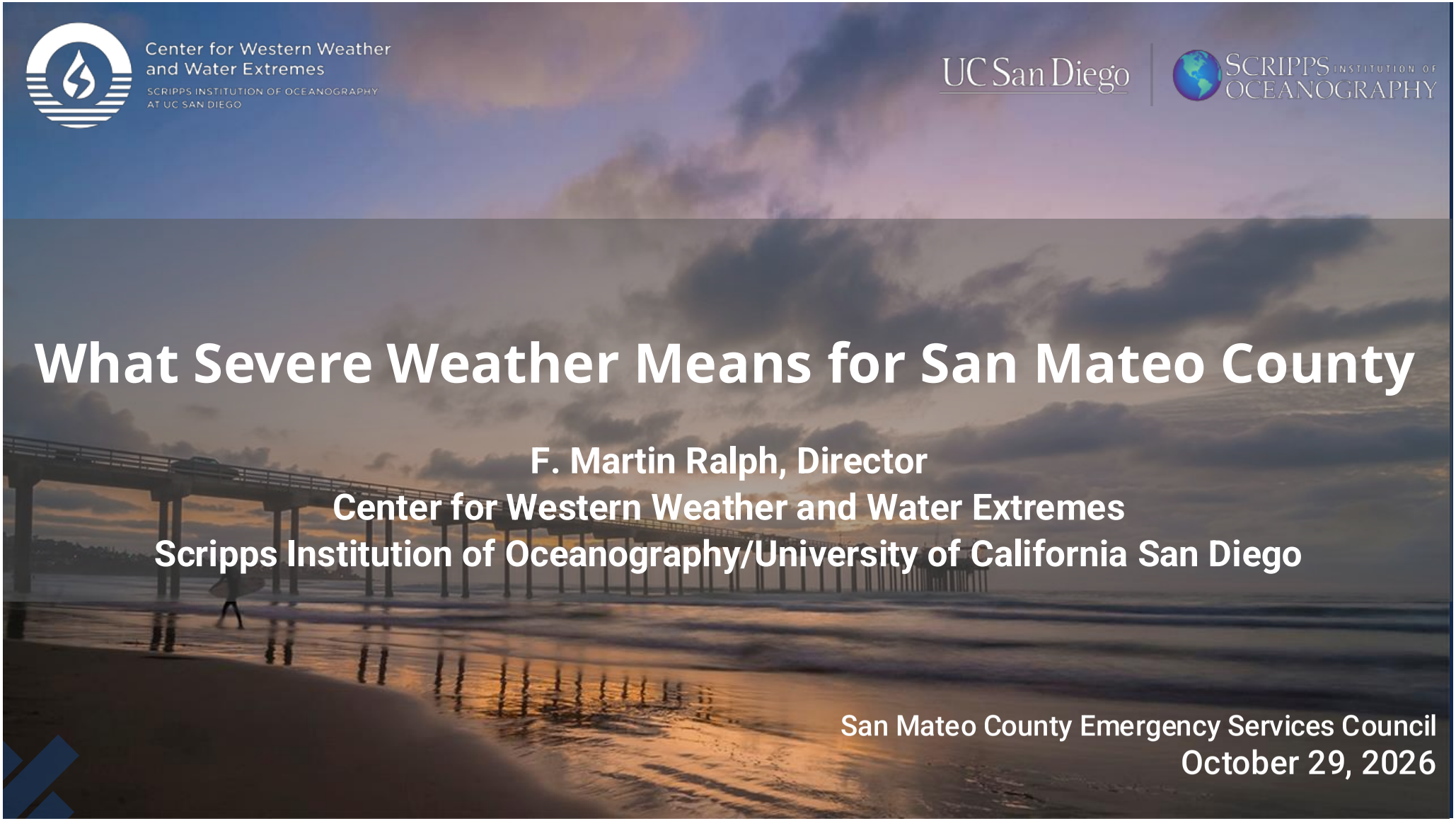
Public Works built 15,000 additional sandbags and published pickup locations across the county. Crews are pre-positioning storm response trailers and clearing drains, culverts and creeks ahead of winter.



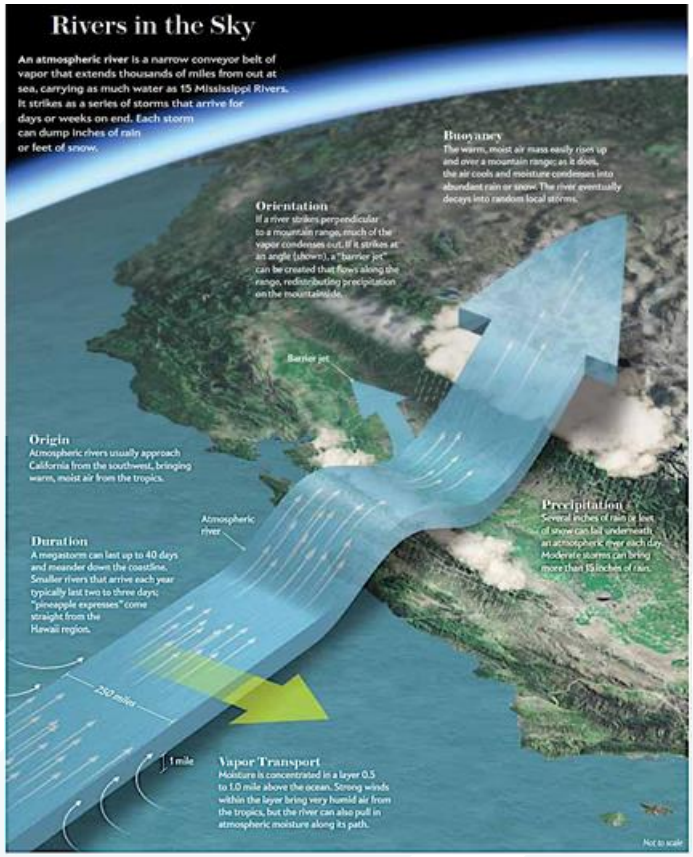
Public Communications

Monthly Operational Area coordination calls started October 21, and the County launched its El Niño Readiness webpage. Our social media toolkit is out in English, with Spanish, Simplified Chinese and Tagalog coming soon.

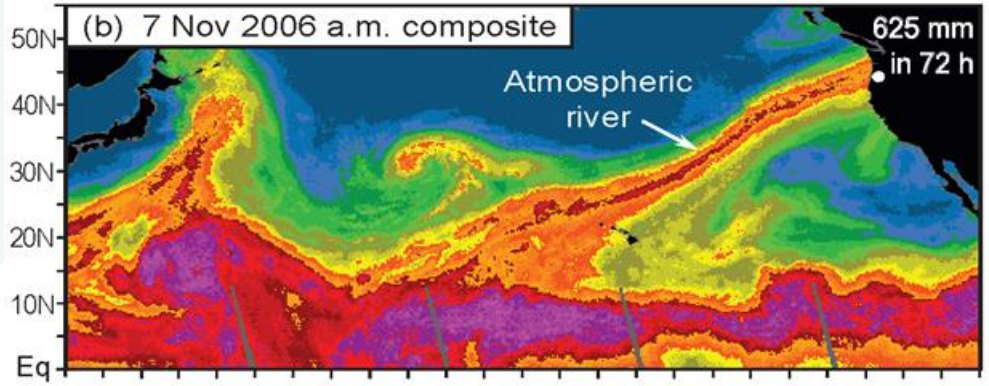



Center for Western Weather
and Water Extremes
SCRIPPS INSTITUTION OF OCEANOGRAPHY
AT UC SAN DIEGO
UC San Diego
SCRIPPS INSTITUTION OF
OCEANOGRAPHY
What Severe Weather Means for San Mateo County
F. Martin Ralph, Director
Center for Western Weather and Water Extremes
Scripps Institution of Oceanography/University of California San Diego
San Mateo County Emergency Services Council
October 29, 2026

ARs: Primary Moisture Source, with Usable Predictive Skill



Atmospheric Rivers (ARs) are *Rivers in the Sky,* **i.e., long narrow bands of airborne water vapor, carrying as much water as 25 Mississippi Rivers*.**



An AR that hit Washington & Oregon produced 25 inches of rain in 3 days.

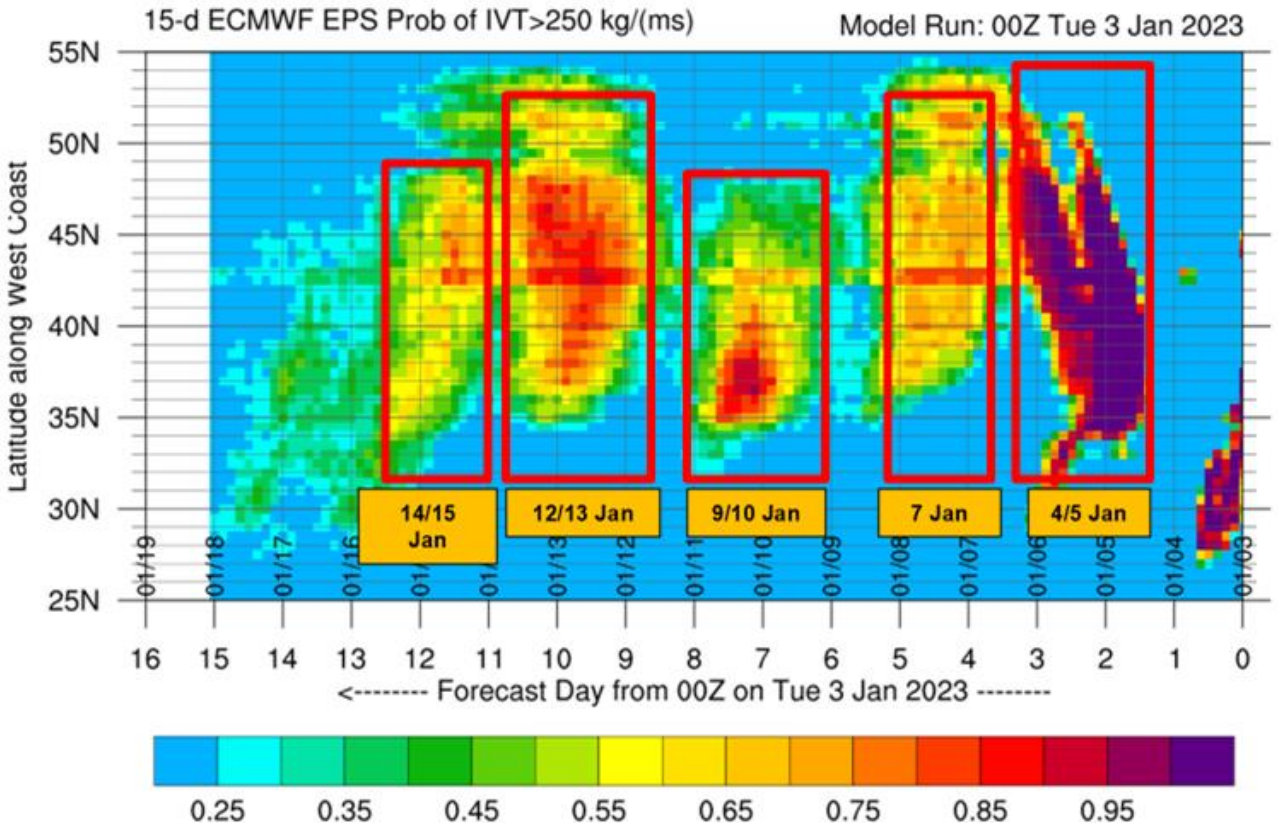
ARs can produce extreme precipitation and flooding.

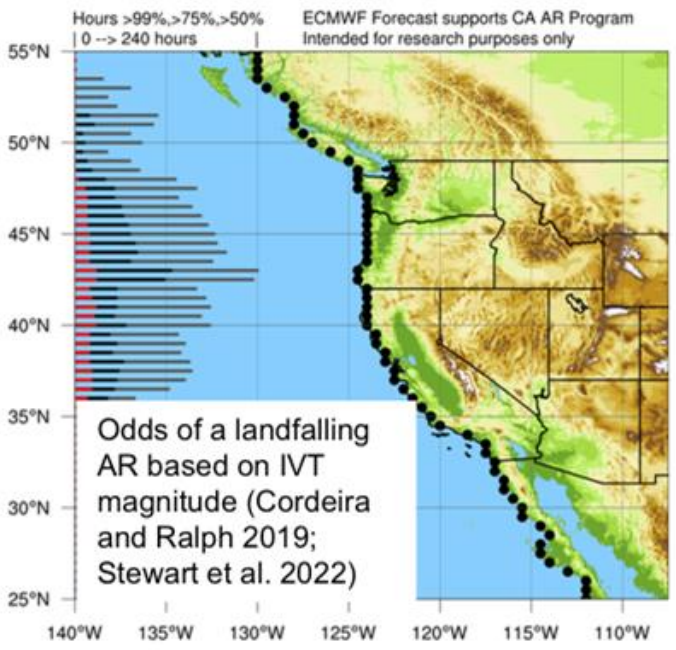
However, ARs also provide up to half of annual precipitation and mountain snow that are key to water supply.

Sources: Rivers in the Sky graphic: Dettinger and Ingram (2013), Scientific American. *Ralph et al. (2017).

Center for Western Weather and Water Extremes

How Far in Advance Can We Predict Landfalling ARs?

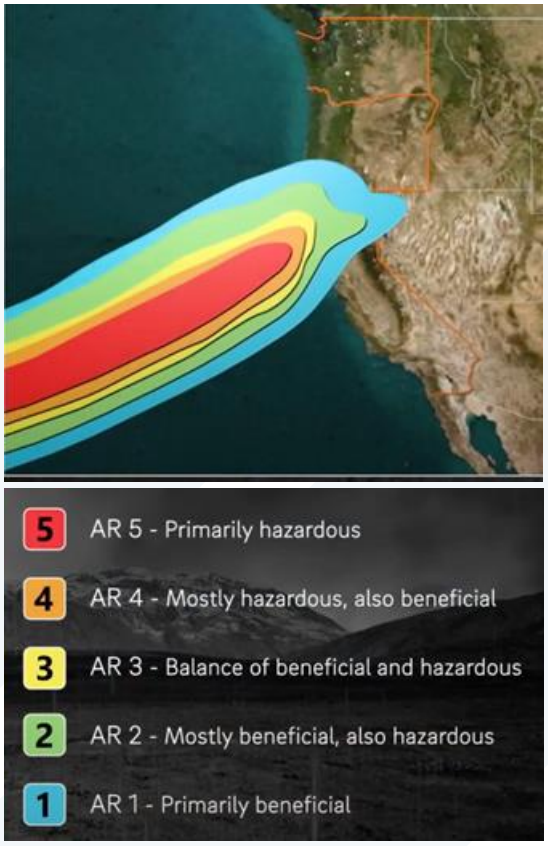


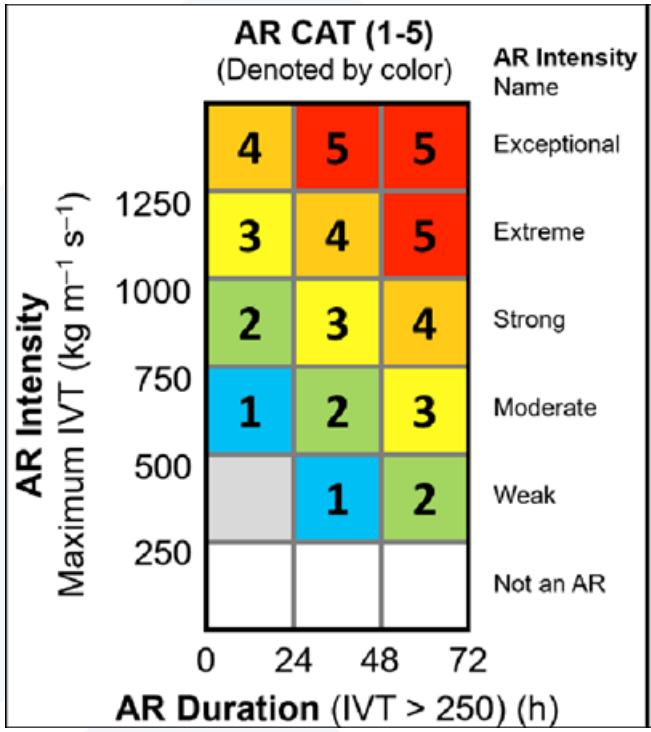


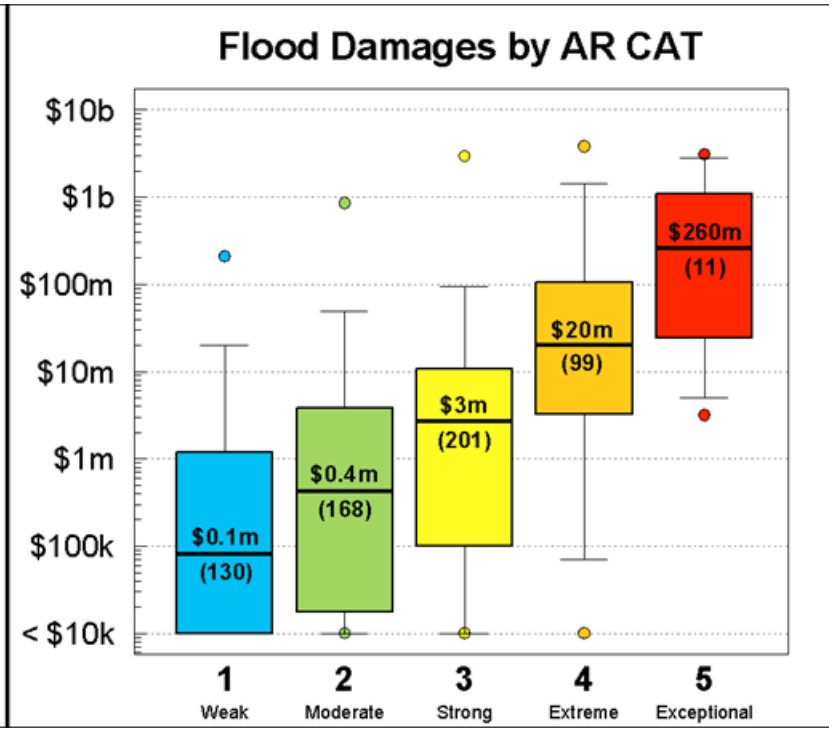
Source: CW3E; ECMWF EPS forecast, 00Z 3 Jan 2023. Landfall odds: Cordeira and Ralph (2019); Stewart et al. (2022).

Center for Western Weather and Water Extremes

The AR Scale



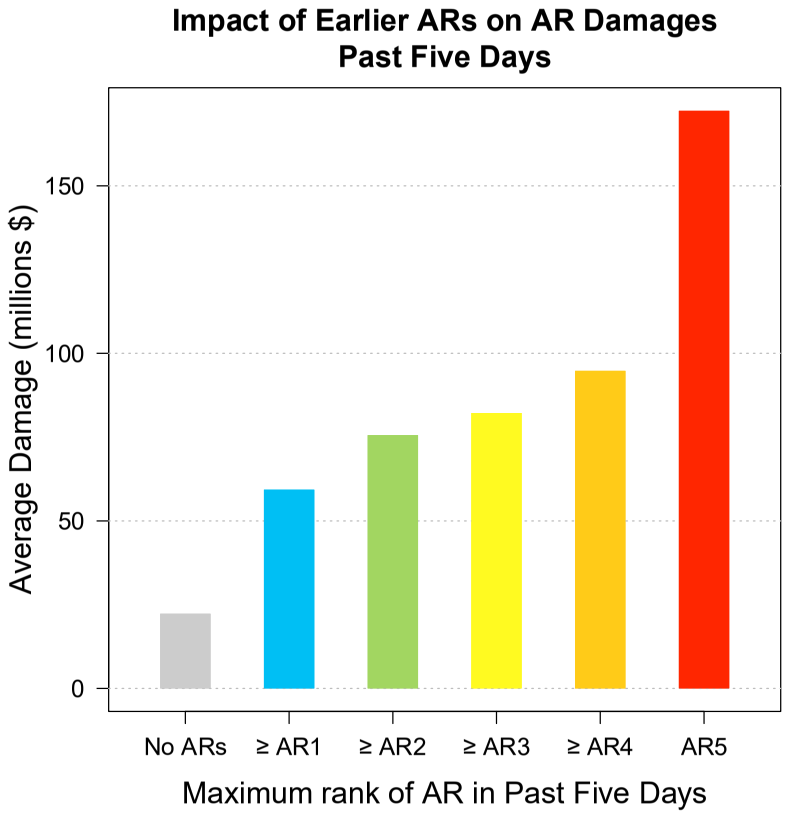




Sources: Ralph et al. (2019); Corringham et al. (2019).

Center for Western Weather and Water Extremes

Impact of Antecedent ARs

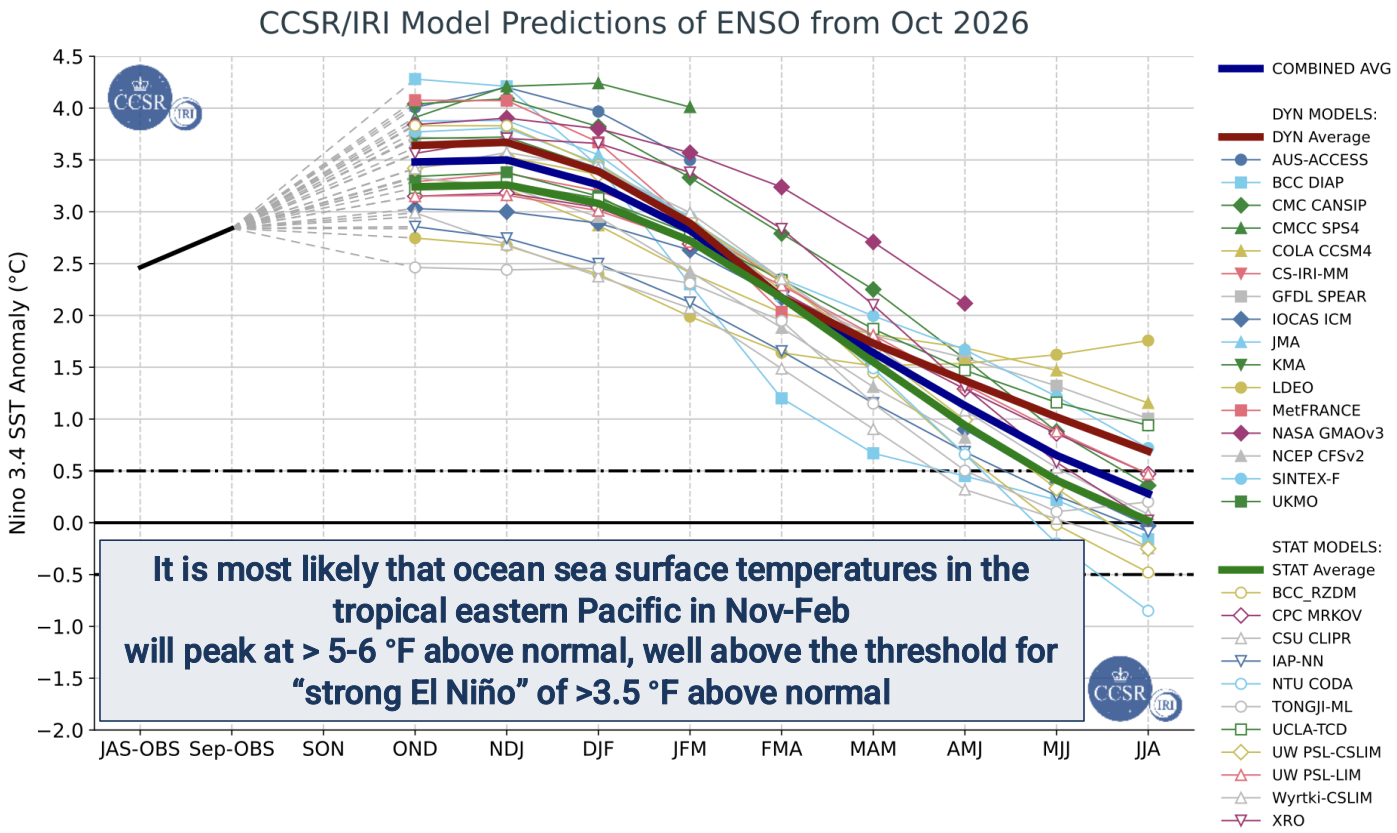


- One or more ARs in the past five days increases the expected damage of the next AR from $22 million to $60 million (166% increase)
- At least one AR5 in the past five days increases the expected damage of the next AR from $22 million to $172 million (673% increase)

Source: Corringham et al. (2019), Science Advances.

Center for Western Weather and Water Extremes

Latest ENSO Forecasts: October 2026



Weak: 0.5 to 0.9° C
Moderate: 1.0 to 1.4°C
Strong: >1.5°C
Very Strong: >2.0°C

- All dynamical and statistical models are predicting the very strong El Niño to persist in intensity through late autumn/early winter
- El Niño is predicted to begin weakening through mid-to-late winter and spring 2027

Source: CCSR/IRI Model Predictions of ENSO from October 2026.

Center for Western Weather and Water Extremes

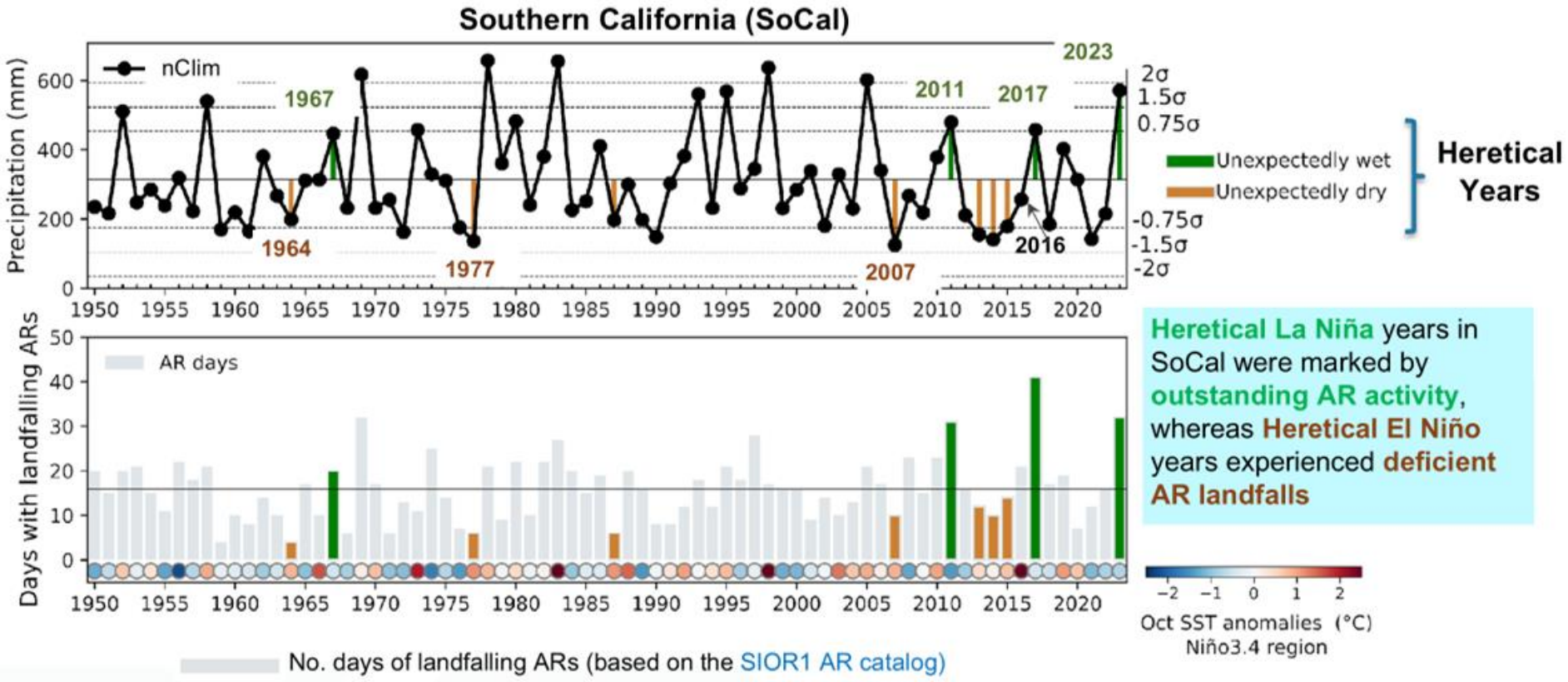
Years with Strong El Niño

Water Year	PkRONI	Season	Statewide Precipitation	Apr 1 SWE
1958	2.02	Dec - Feb	149%	171%
1966	2.04	Oct - Dec	84%	83%
1973	2.27	Nov - Jan	113%	148%
1983	2.52	Nov - Jan	184%	227%
1992	2.32	Dec - Feb	84%	60%
1998	2.38	Sep - Nov	167%	158%
2016	2.37	Nov - Jan	102%	85%

Source: California Department of Water Resources.

Center for Western Weather and Water Extremes

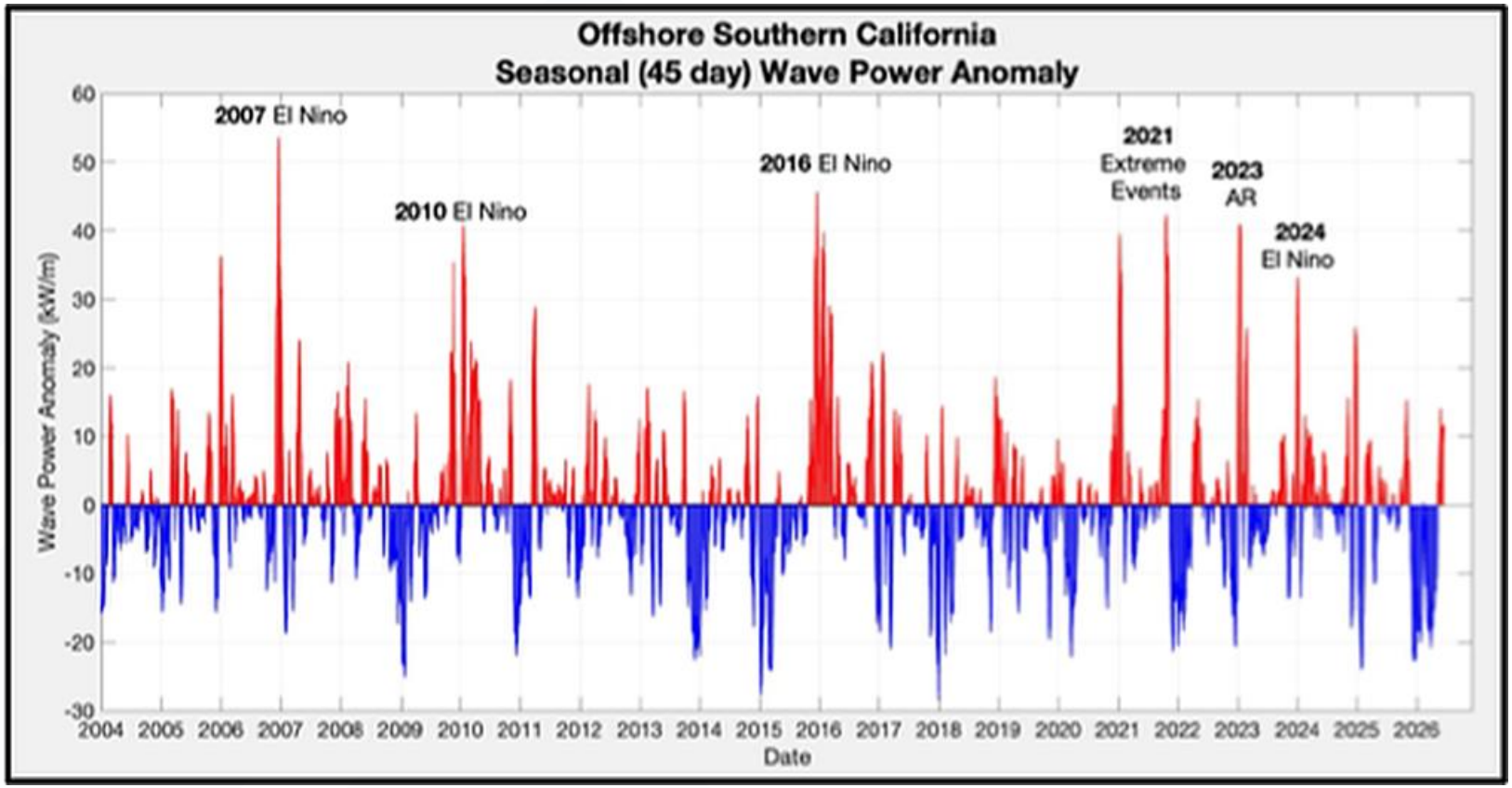
ARs Disrupt Seasonal Precipitation Forecasts in California



Source: Luna Niño et al. (2025), Climate Dynamics.

Center for Western Weather and Water Extremes

El Niño Years Bring Powerful Waves and Coastal Erosion



Source: Scripps Institution of Oceanography, Coastal Data Information Program (CDIP), cdip.ucsd.edu.

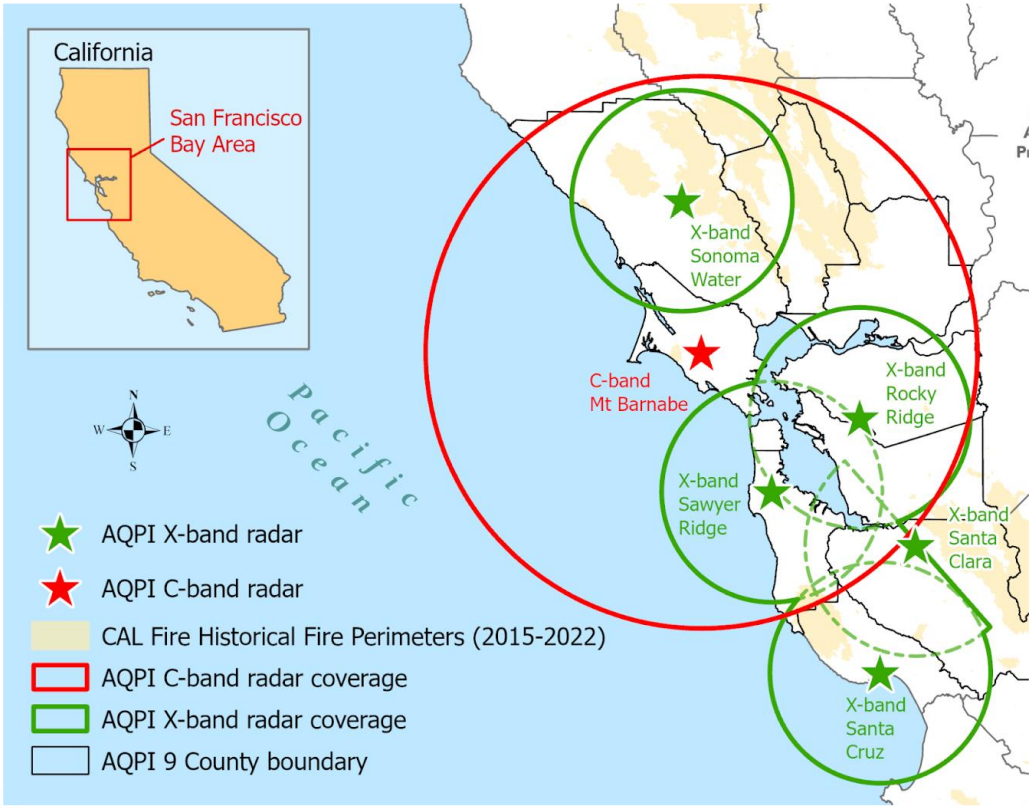
Center for Western Weather and Water Extremes

AQPI: Improving Radar Quality

The Advanced Quantitative Precipitation Information (AQPI) radar network strategically complements the existing NWS radar network by filling gaps in coverage and providing more accurate rainfall data in densely-populated areas.

It improves Bay Area radar quality in 3 primary ways:

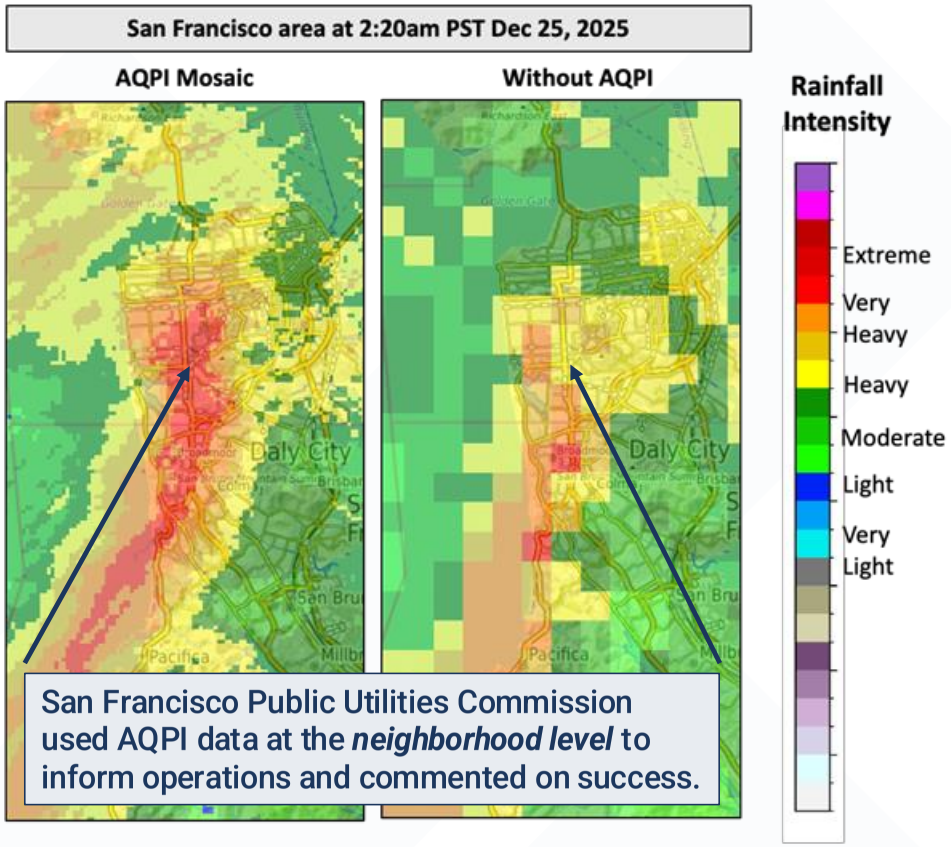
1) Expanded radar coverage
2) Improved spatial resolution
3) Improved temporal resolution

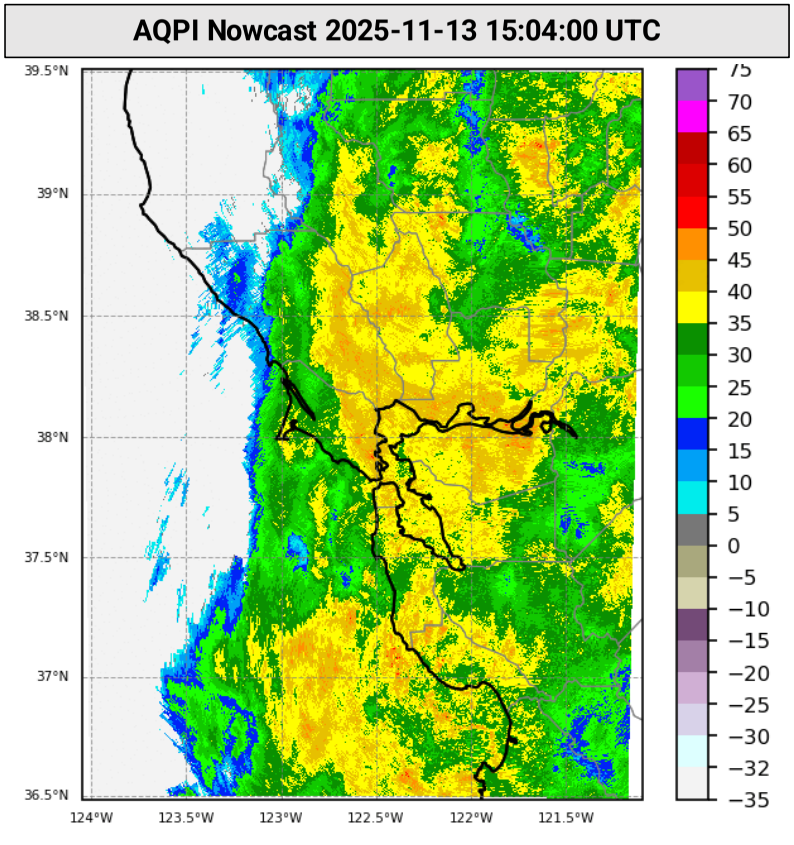


Source: AQPI (NOAA, CW3E, DWR and Bay Area partners).

Center for Western Weather and Water Extremes

AQPI: Radar Mosaic and Nowcast





Source: AQPI (NOAA, CW3E, DWR and Bay Area partners).

Center for Western Weather and Water Extremes

CW3E & SMC EM Partnership

Phase 1: Project ARES

Atmospheric River Emergency System

The beginnings of a new partnership leveraging CW3E scientific excellence and SMC EM leadership in emergency preparedness and response to drive transformational change in preparing for weather-related risks

- Foundational Research
- Next-Generation Operational Tools
- High-Impact Event Support & Executive Engagement
- Transforming Public Understanding



ARES: Days, Hours, and Minutes Out

A standing partnership between SMC EM and CW3E

DAYS OUT

Is an AR coming, and how strong?

CW3E AR forecasts and the AR Scale rank landfalling storms 1 to 5 by strength and duration. AR Recon flights sharpen the forecast over the Pacific.

County action: Staffing, prepositioning, advisory messaging

HOURS OUT

Is it lining up with people?

The AQPI radar mosaic. Mt Barnabe C band watches the offshore approach; Sawyer Ridge X band resolves where rain sets up over county basins.

County action: Targeted alert and warning, crisis communications

MINUTES OUT

Where, when, and how bad?

The AQPI 0 to 1 hour nowcast, refreshed every 1 to 2 minutes, tracks rain rates over flashy Bayside basins and the gauge poor coast.

County action: Road closures, evacuation, shelter

The data doesn't tell SMC EM whether to activate. It tells SMC EM where, when, and how bad.

Sources: AR Scale: Ralph et al. (2019), BAMS. AQPI: NOAA, CW3E, DWR and Bay Area partners.

Center for Western Weather and Water Extremes

What I'm Looking Out For Most This Winter



- Stronger ARs that stall
- Multiple ARs back-to-back
- Narrow Cold Frontal Rainbands
- Large coastal waves/erosion

Center for Western Weather and Water Extremes

For more information and real-time forecasts see cw3e.ucsd.edu

Scientific American, September 2022
F. Martin Ralph

METEOROLOGY

FORECASTING ATMOSPHERIC RIVERS

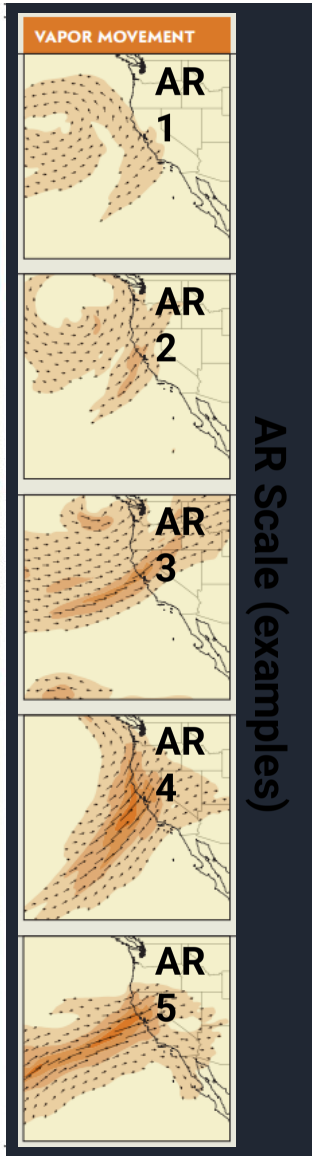
Knowing when torrents of rain will strike can save property and lives

By F. Martin Ralph

Illustration by Mark Ross

62 Scientific American, September 2022

Thank You
Contact: mralph@ucsd.edu



Half Moon Bay El Niño Prep Efforts



- Annual Ditch Maintenance Project
- Sandbag Acquisition
- Public Facing Sandbags
- Attending Briefings
- Monitoring Staff Availability
- Catch Basin Cleaning
- Optimism

Half Moon Bay El Niño Planning

- Working with SMC EM to ensure we have the most current information
- Coordinating with elected officials
- Taking guidance from elected officials
- Coastside EOC preparation
- Prioritized permitting opportunities for flood protection projects
  - Makes more projects viable
  - Pilarcitos Watershed

Questions?





06

Director's Year in Review

Director

Community Centered

Findings from the Community Resilience Survey



94.7%

Residents believe preparedness is important; only 1 in 5 feels prepared

65.4%

Residents rated earthquake above every other hazard

82.9%

Residents would evacuate immediately as instructed

SMC EM in Action

33
Response Support

31
Trainings & Exercises

57
Outreach & Education

34
Alert & Warning

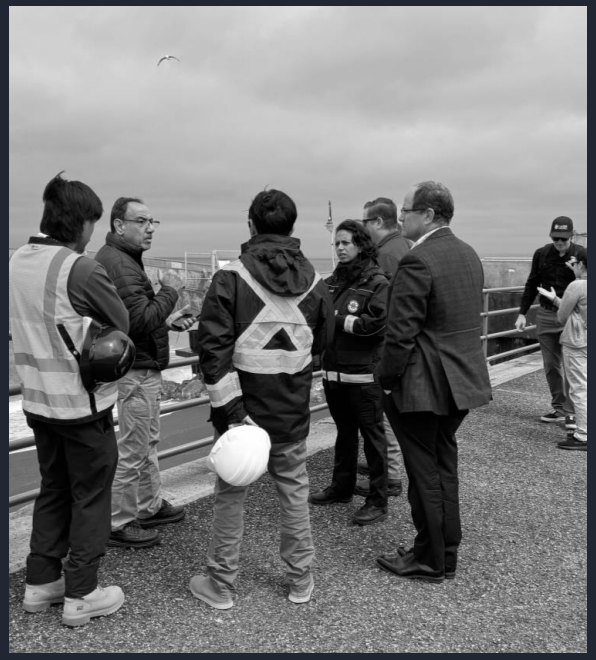




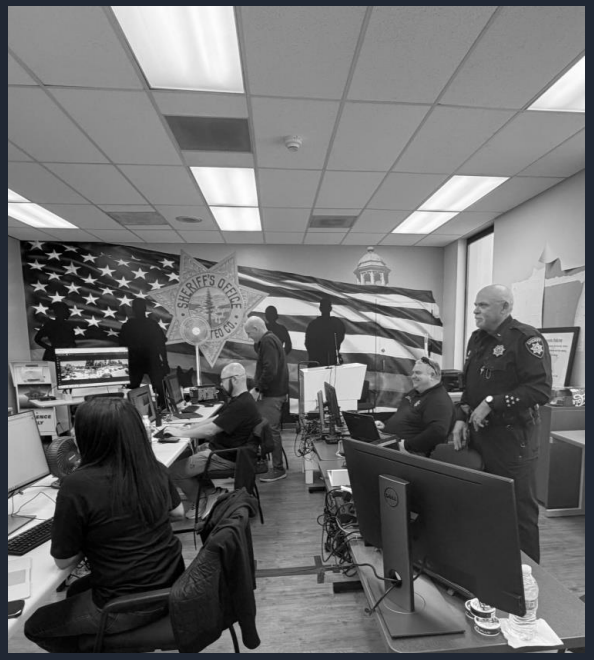
Operational Excellence



Super Bowl LX



Pacifica Pier



FIFA World Cup 2026

07

Report Outs Related to Emergency Services Council and 2027 Calendar Review

Chair & Members

2027 Calendar Review



2027 Emergency Services Council Calendar

January

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

1/19 ESC Onboarding (3:00PM-4:00PM)
1/21 Finance Committee (1:00PM-2:00PM)
1/28 ESC Meeting (5:30PM-7:00PM)

February

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28						

March

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

April

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

4/5 Finance Committee (1:00PM-2:00PM)
4/29 ESC Meeting (5:30PM-7:00PM)

May

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

June

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

July

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

7/12 Finance Committee (1:00PM-2:00PM)
7/29 ESC Meeting (5:30PM-7:00PM)

August

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

September

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

9/20 Finance Committee (1:00PM-2:00PM)
9/30 ESC Meeting (5:30PM-7:00PM)

October

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

November

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

December

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

2027 Holidays

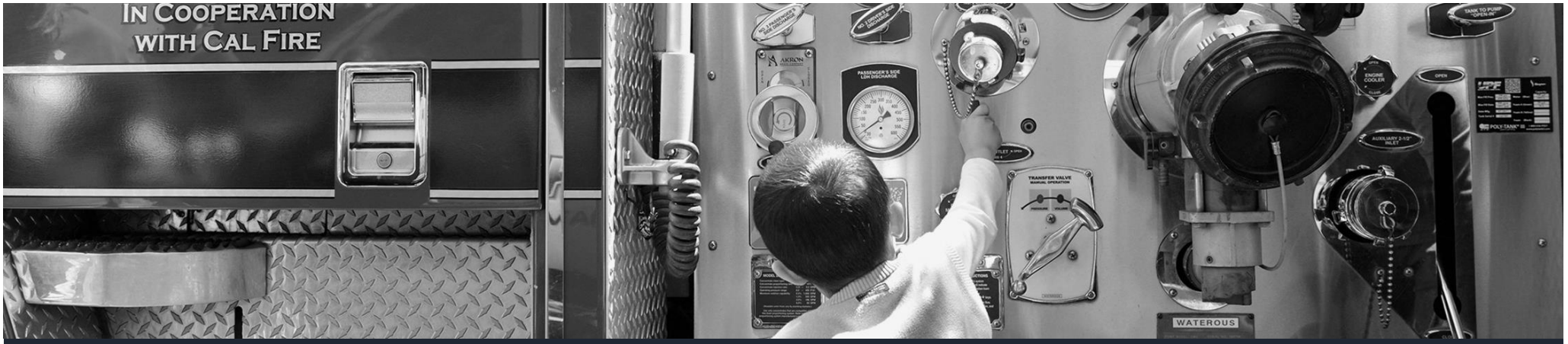
Jan 1	New Year's Day	Mar 31	Farmworkers Day	Sept 6	Labor Day	Nov 26	Day After Thanksgiving
Jan 18	Martin Luther King Day	May 31	Memorial Day	Oct 11	Indigenous People's Day	Dec 25	Christmas Day
Feb 12	Lincoln's Birthday (Floating Holiday)	Jun 19	Juneteenth	Nov 11	Veterans Day		
Feb 15	President's Day	July 4	Independence Day	Nov 25	Thanksgiving Day		

Version 01.22.26.1

08

Adjournment

Chair


IN COOPERATION
WITH CAL FIRE
AKRON
PASSENGER'S SIDE
LDH DISCHARGE
TRANSFER VALVE
MANUAL OPERATION
ENGINE
COOLER
OPEN
AUXILIARY 2-1/2"
INLET
TANK TO PUMP
"OPEN-IN"
POLY-TANK
WATEROUS

Thank You