



CITY OF CARMEL-BY-THE-SEA

El Niño/Storm Preparedness and Shoreline Project Updates

City Council Meeting

Shari Carlet

October 6, 2026



Purpose

To provide updates on Shoreline and Beach Projects and outline the City's ongoing El Niño and storm preparedness efforts aimed at ensuring operational readiness and community protection.



Agenda

- ❖ Present the Potential Impacts of El Niño and Storm-Season On-Going Preparedness Plan
- ❖ Update on Shoreline CIP projects and operational preparation
- ❖ Updates from the City's El Niño Task Force and the Storm / El Niño Preparedness Plan
- ❖ Proposed community outreach and readiness
- ❖ Plans for external collaboration and potential mutual aid
- ❖ Fiscal considerations and next steps



2026/2027 Winter Outlook

City of Carmel-By-The-Sea

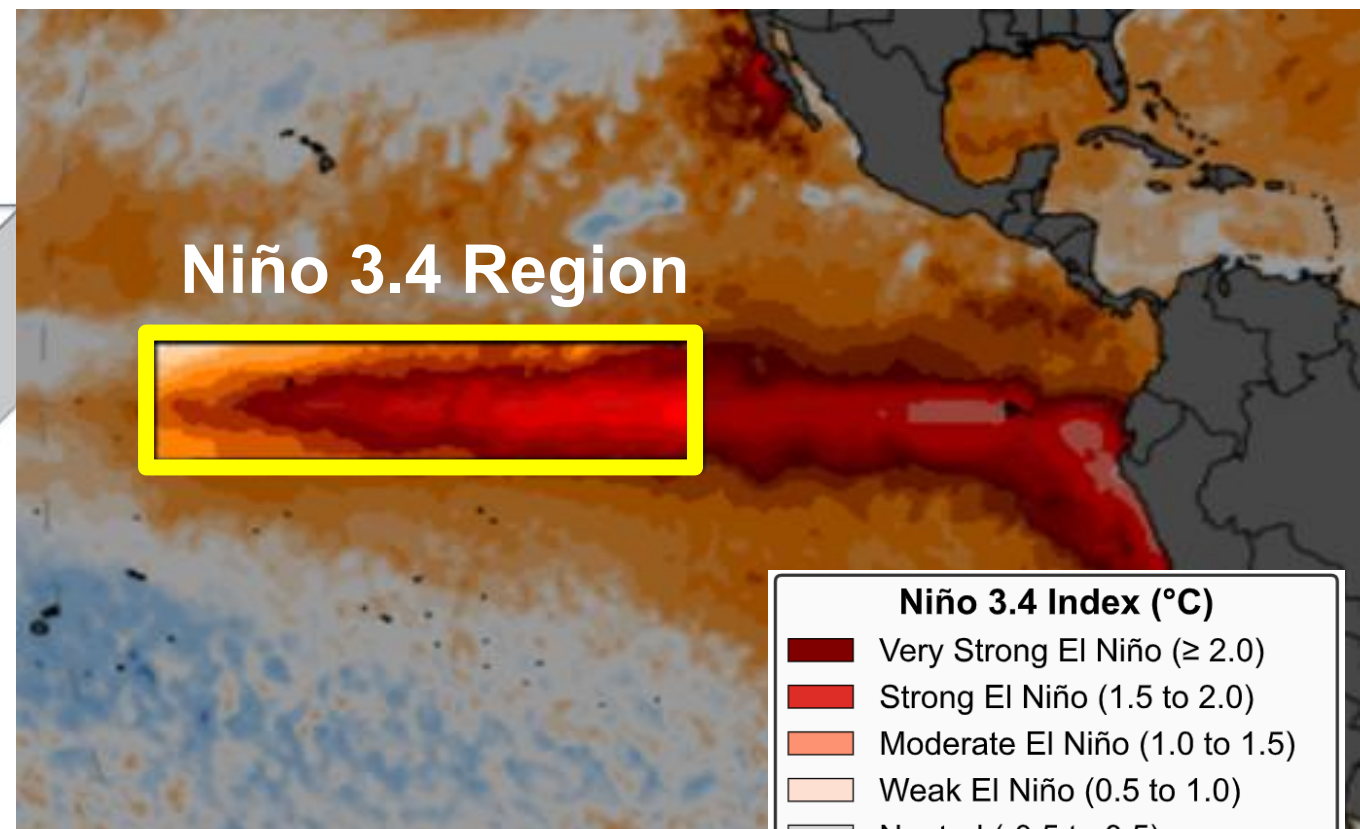
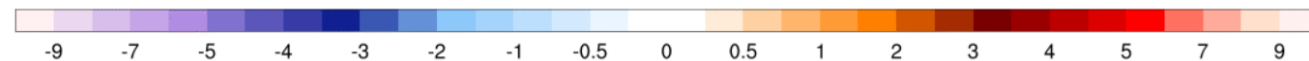
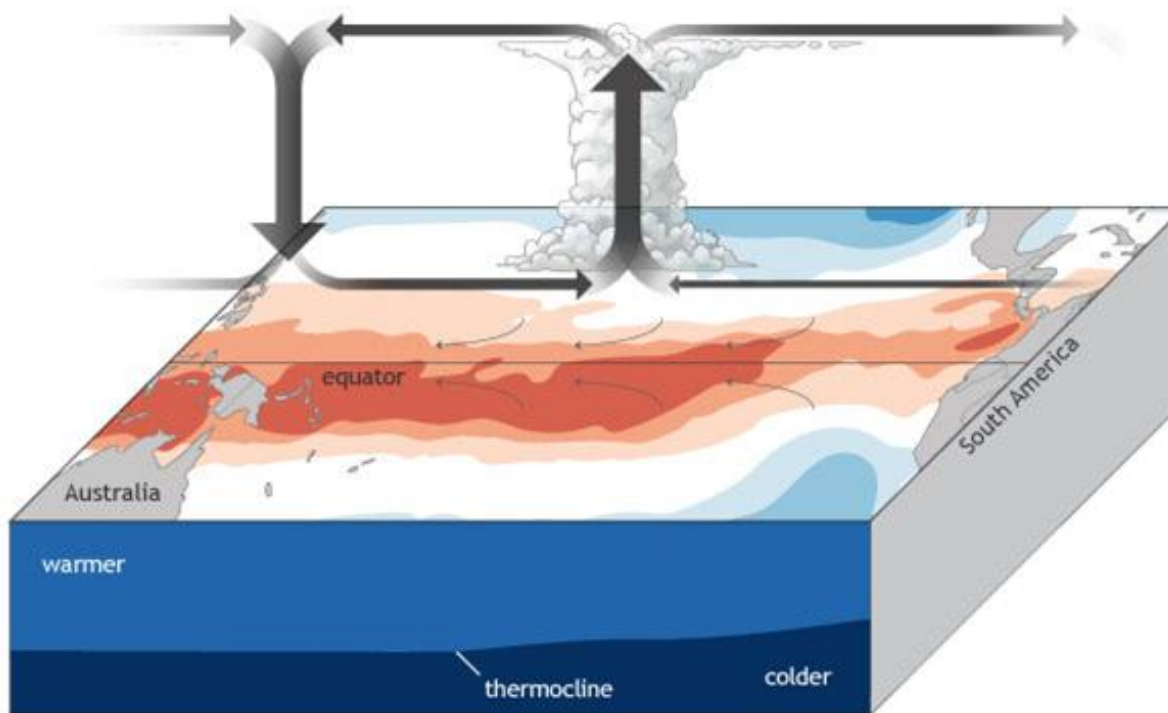
Dylan Flynn: Lead Meteorologist
dylan.flynn@noaa.gov
NWS San Francisco Bay Area (Monterey)
October 6, 2026



U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service

What is El Niño?

Atmosphere-ocean feedbacks during El Niño-Southern Oscillation
El Niño



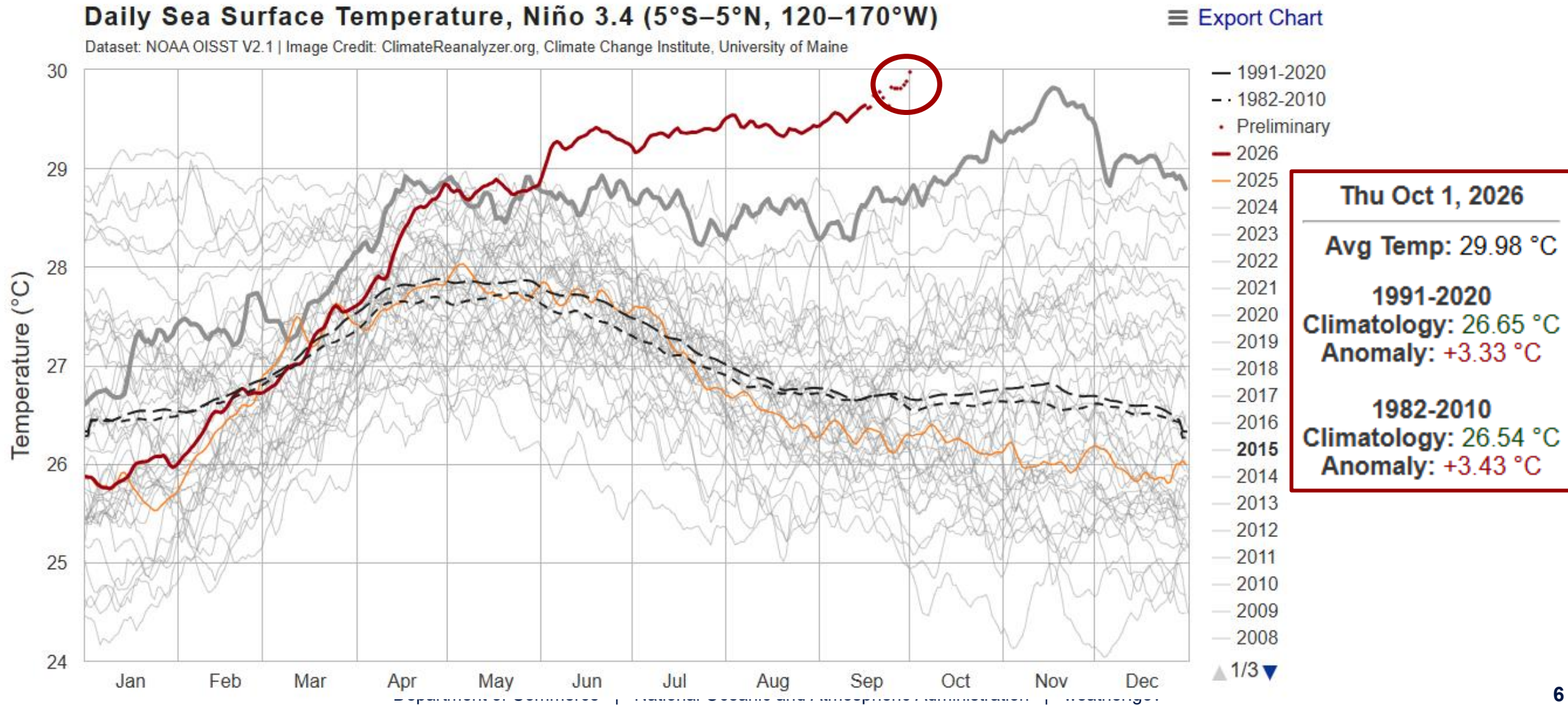
Niño 3.4 Region

Niño 3.4 Index (°C)

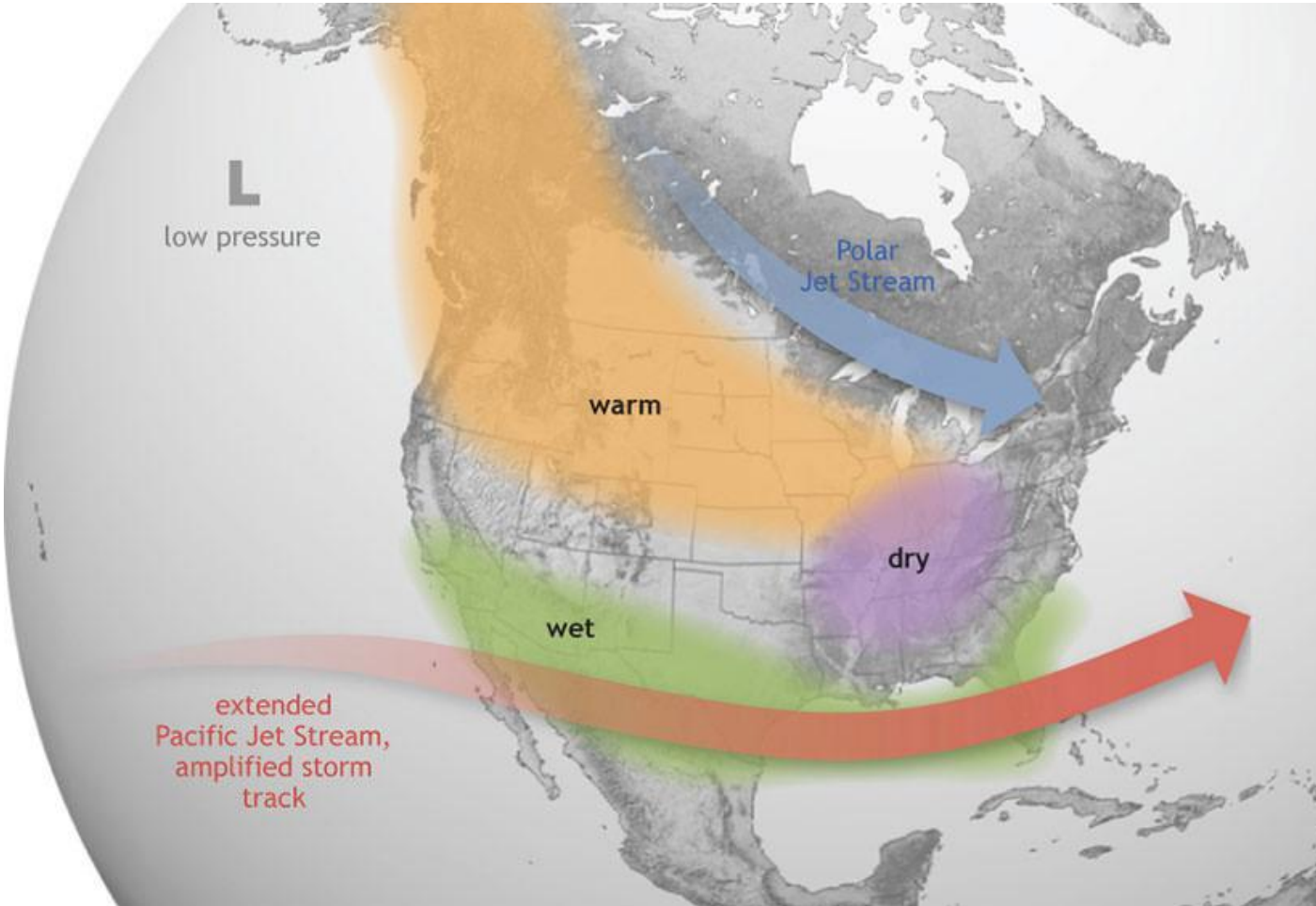
- Very Strong El Niño (≥ 2.0)
- Strong El Niño (1.5 to 2.0)
- Moderate El Niño (1.0 to 1.5)
- Weak El Niño (0.5 to 1.0)
- Neutral (-0.5 to 0.5)
- Weak La Niña (-1.0 to -0.5)
- Moderate La Niña (-1.5 to -1.0)
- Strong La Niña (-2.0 to -1.5)
- Very Strong La Niña (≤ -2.0)

A greater than +0.5 °C SST anomaly across Niño 3.4 for at least 5 consecutive overlapping three-month periods

Current Sea Surface Temperatures in Niño 3.4



Strong/Very Strong El Niño and Precipitation Odds



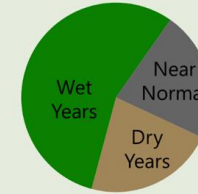
Strong & Very Strong El Niños

Past observations do not guarantee a future outcome

Northern California



Central California



Southern California



Sierra Nevada

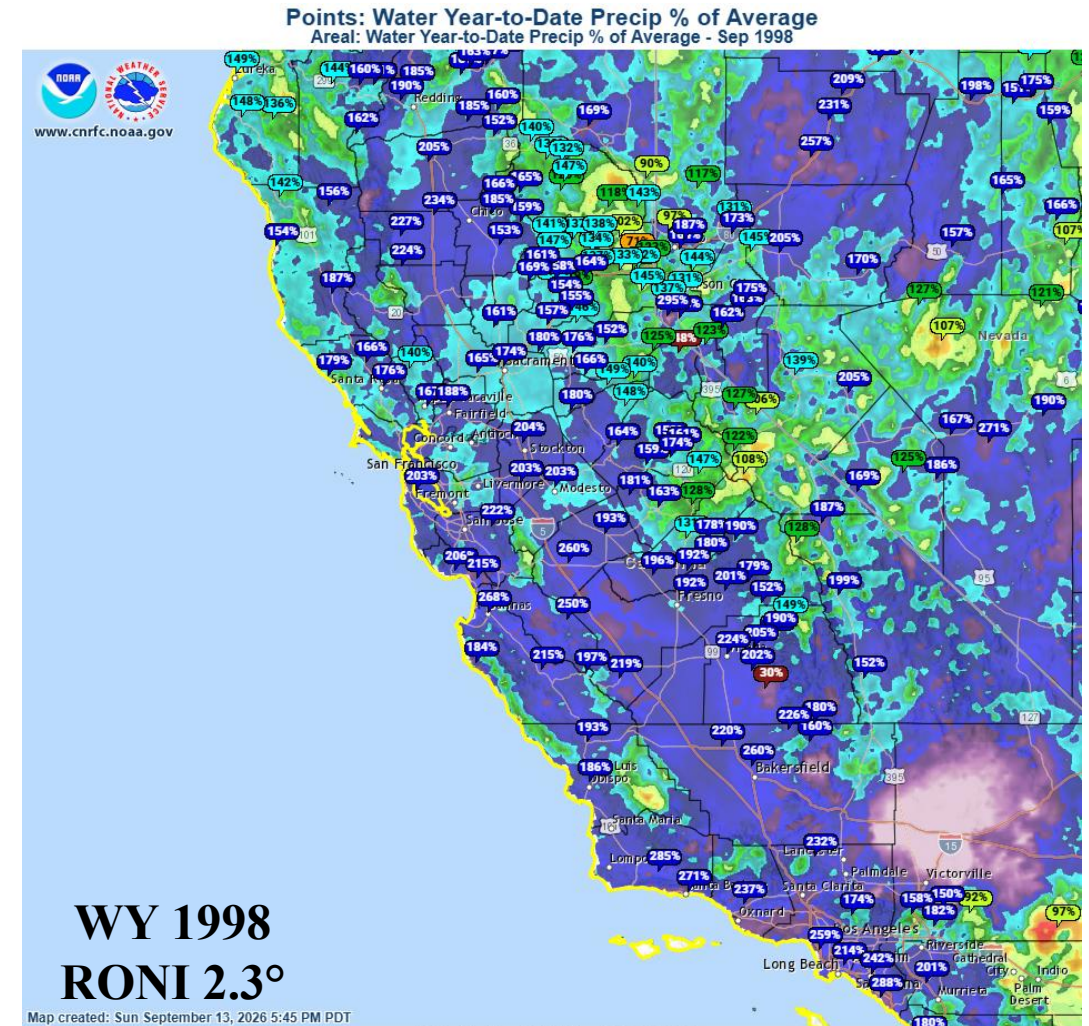
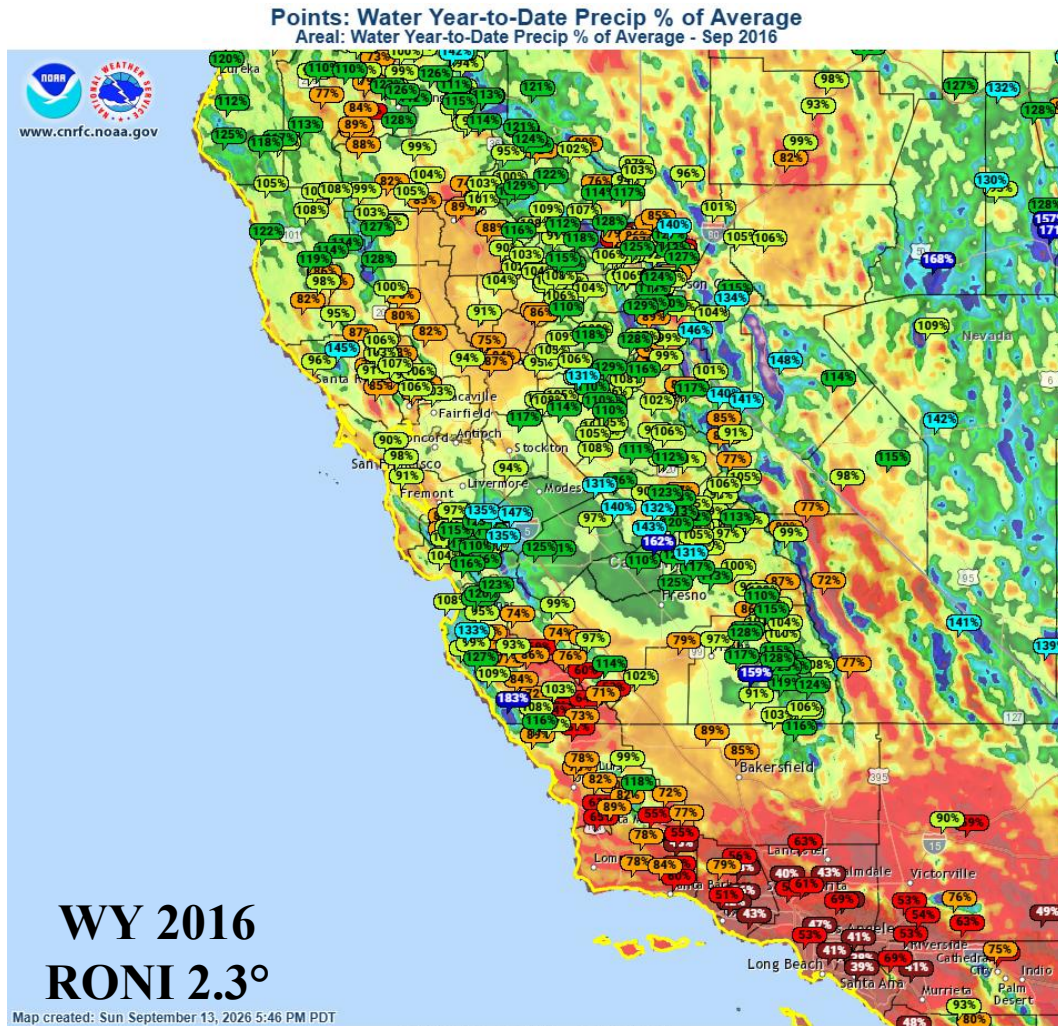


NATIONAL WEATHER SERVICE
SACRAMENTO, CA

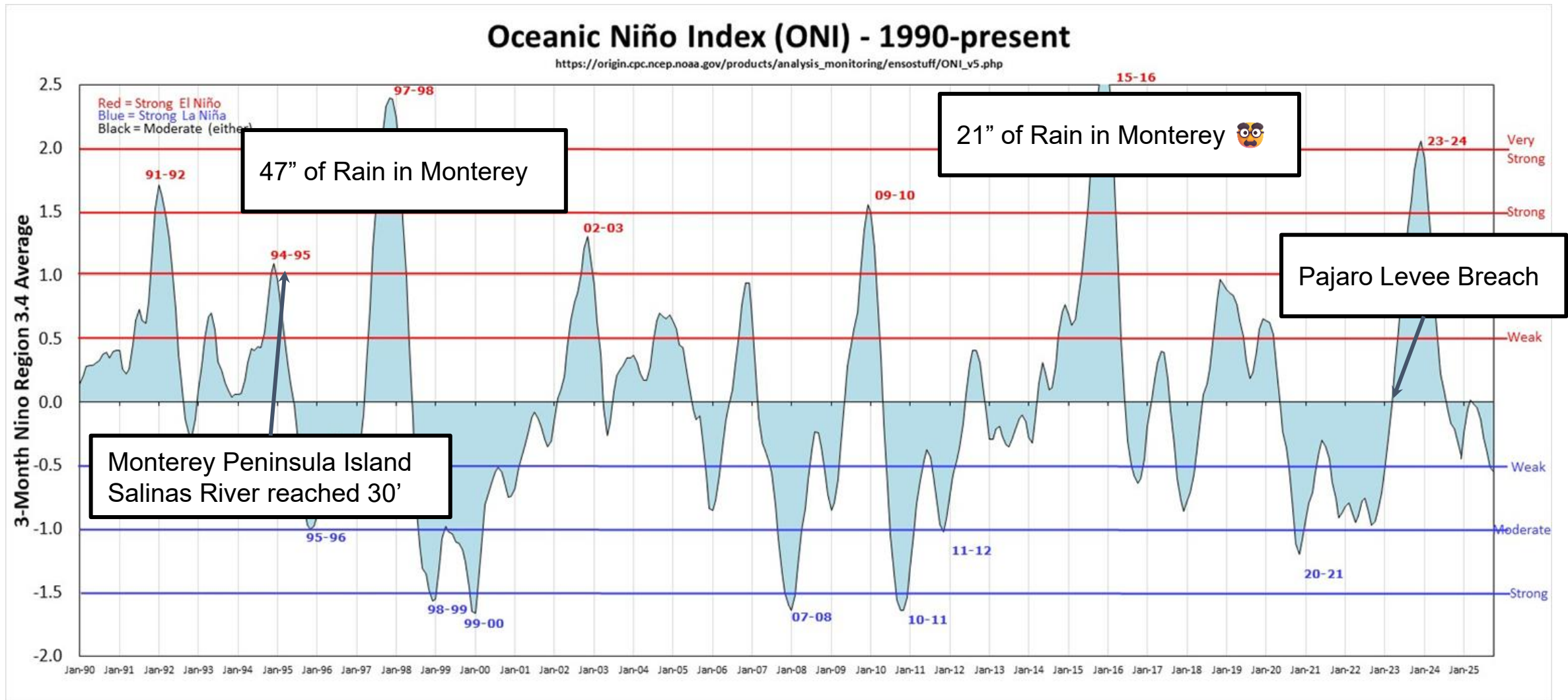
Strong (3) + Very Strong (6) El Niño Years
Winter RONI ERSSTv6 Values ≥ 1.5

Data: PRISM, Oregon State University
Updated: WY2026

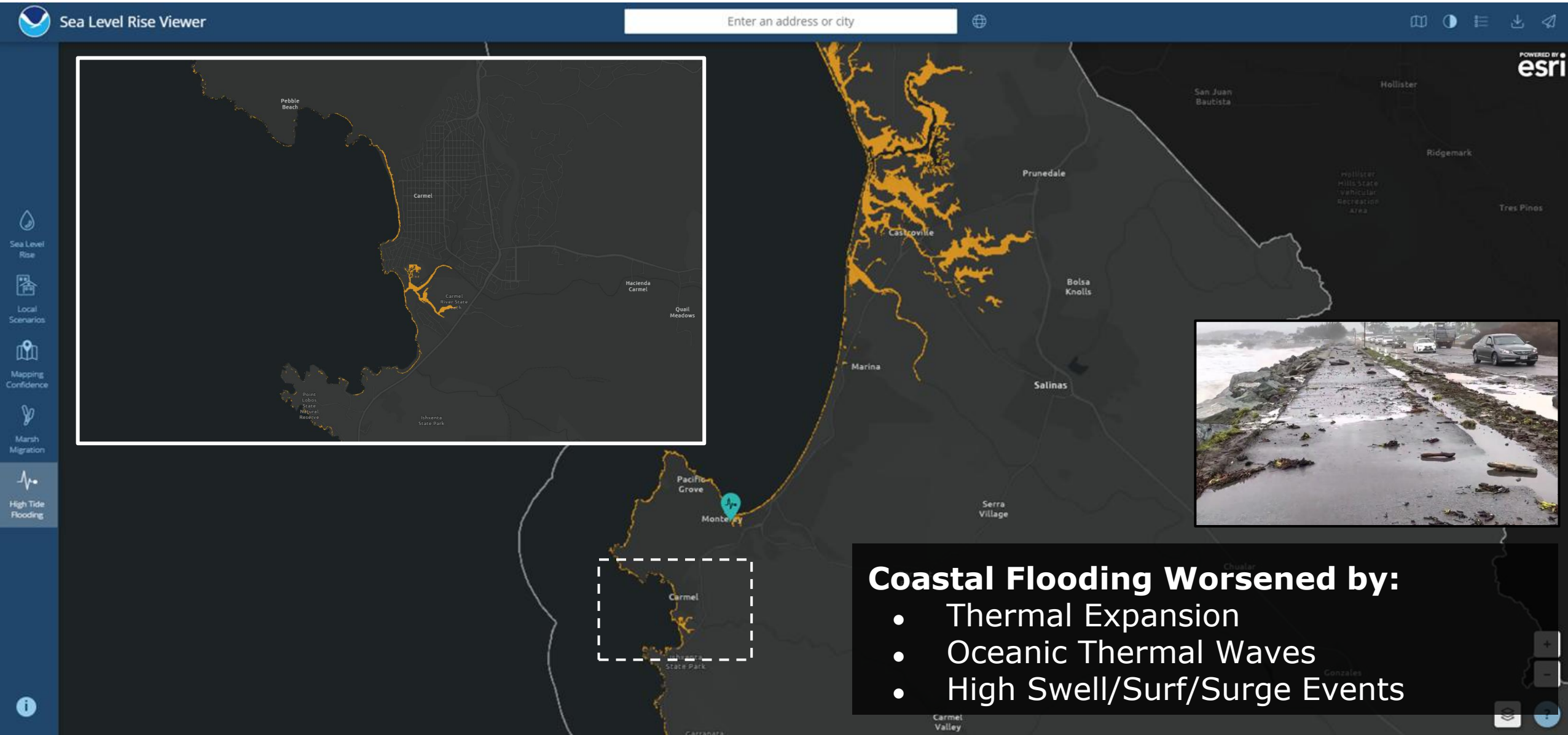
Very Strong/Strong El Niño - No Two are the Same



Very Strong/Strong El Niño - No Two are the Same



Winter Time Hazards: Coastal Flood



Stacking ENSO

King Tides:
Nov. 25 🦃
Dec. 24 🎄
Jan. 21

Kelvin Wave (~0.5')
Thermal Expansion (~0.5')
Wave Set Up (varies)

Storm Surge (up to 2')
Sea Level Rise (0.3')

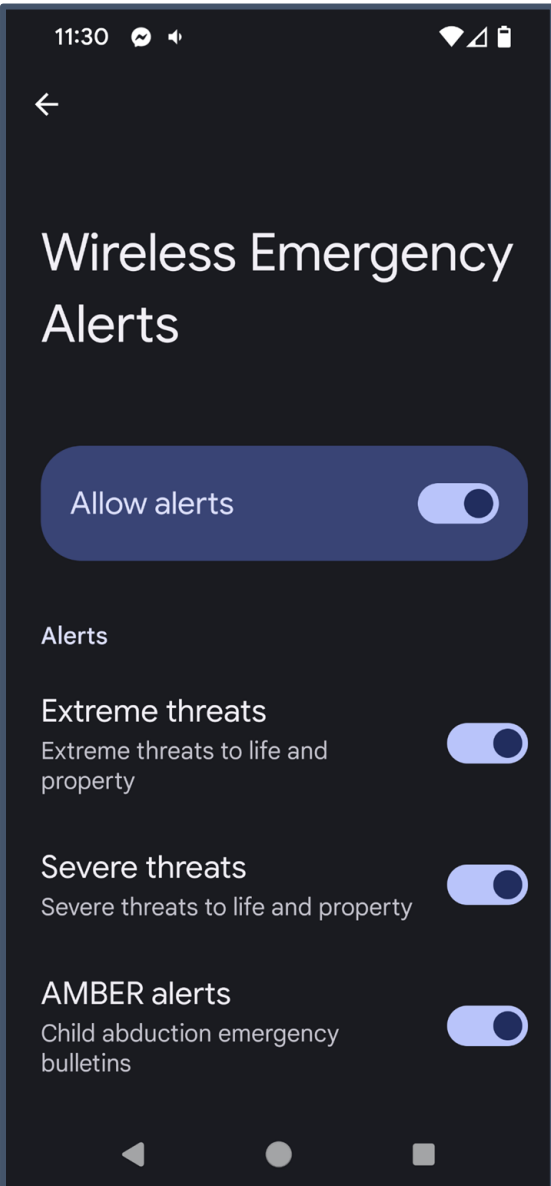
Tides (5-7' swings)



Alert and Warning

Type	Definition	Threat	Action
Warning	Imminent or Occurring	Threat to life and property	Take protective action
Advisory	Imminent or Occurring	Threat of inconvenience	Use caution
Watch	Conditions are favorable for a hazard to occur	Threat to life and property	Have a plan of action

Redundant Sources of Warnings



- Phone settings - notifications - wireless emergency alerts - on
- calalerts.org
- weather.gov
- Phone apps
- Smart speakers
- NOAA Weather Radio
- Social Media @NWSBayArea



Impacts of El Nino and Storms

How it could affect our community

Ocean

- Sea level can run about 6–13 in higher for the season
- King tides plus big swells
- Beach and bluff erosion, storm surge

Rain & wind

- Street and drainage flooding
- Trees falling, roads blocked
- Power outages

Our shoreline

- Scenic Road, beach stairways and outfalls are directly exposed
- Beach access may close during large swells



State Declares State of Emergency

Why the State declared an emergency

On **21 Sept 2026** the Governor proclaimed a statewide emergency for the developing El Niño, **before** the storms arrive.

Why

- Very strong, possibly historic El Niño forecast
- Higher risk of flooding and coastal damage

What it does

- Mobilizes State resources and speeds procurement
- Readies Caltrans and the National Guard

For Carmel

- Supports local planning and mutual aid
- Does not fund local projects by itself



Shoreline CIP and Operations Updates

Sand redistribution

- First operation in June
- Second in late September and early October, reinforcing revetments, the sand ramp and bluffs
- A third before winter storms if conditions call for it

Santa Lucia / 13th Ave ADA ramp

- **Completed** early September 2026
- New ADA ramp, accessible parking and pathway upgrades

Scenic Road bluff repair at 11th Ave

- Urgent; planned before winter storms
- Design nearly done; contractor quotes received
- Riprap being secured at no cost from the Monterey Regional Park District
- Construction expected to start early November, pending expedited procurement and emergency authorization



Shoreline Project Updates

10th and 12th Ave beach stairs

- Approved July 24, 2026
- **Proposed to postpone to spring 2027**
- Building during storm season could jeopardize the project because of its in-kind design

Sand ramp at 8th Ave

- Long-term resiliency project
- Geotechnical borings done March 2026
- Interim armoring and sand redistribution now
- Design consultant procurement planned for spring 2027; about 2 to 3 years to design, permit and build

4th Ave outfall

- Geotechnical work done March 2026
- On hold until next fiscal year per the adopted 5-year CIP, due to budget, staffing and Council priorities

Vista Lobos transfer switches

- Installation being prepared
- Reliable emergency power; potential auxiliary EOC



EL Nino City Task Force Updates

Who and how often

- Meeting consistently since **June 2026**, and continuing regularly
- All major City departments and executive leadership

What it does

- Defines and refines each department's roles and responsibilities
- **Before:** pre-season maintenance and inspections
- **During:** real-time staffing and resource deployment
- **After:** damage assessment and recovery

Working with partners

- Monterey County, NOAA, Monterey Fire, CalFire, PG&E and neighboring jurisdictions
- Exploring mutual aid, shared response strategies and State and Federal resources

Main outcome

- A **Storm Operations Manual**: durable, updated every year
- Standard protocols, better communication, seamless coordination
- Community meeting planned for **October 12, 2026**
- Communication information, meetings and engagements are planned: outreach, informational materials, coordinated messaging, workshops and community meetings



Storm Preparedness Operations Manual

Storm Preparedness Operations Manual

A living manual with protocols for before, during and after every storm, updated after each event.

Operations

- Roles and responsibilities by department
- Drains, trees, roads, shoreline and facilities
- Staffing, equipment and on-call contractors

Communication & alerts

- ALERT Monterey, website, social media, text, radio
- Message templates and approval path
- Public information and closure notices
- Messaging to the community: informational flyers, social media, City website and Constant Contact

Protocols

- EOC activation triggers and tiers
- Evacuation, road and beach closures
- Damage assessment and recovery steps

Interdepartmental collaboration

- Shared incident roles and contacts
- Regular briefings and handoffs
- Lessons learned after each storm

External agencies & mutual aid

- Monterey Fire, CalFire, PG&E, NOAA/NWS
- Mutual aid requests and agreements
- Requests for resources from State and Federal agencies

City Council

- Report to Council about storm season and El Niño briefings
- Emergency declarations and ratification
- Budget and spending authority



Planned and On-Going City Operations

What we are doing right now

Drains & streets

- Inspecting, jetting and flushing storm drains
- Targeting drainage hotspots
- Sandbag supply and refills
- Creek and streambed maintenance

Trees & power

- Hazard tree work along emergency routes
- On-call contractors lined up
- Coordinating vegetation work with PG&E

Shoreline

- Berm and erosion review
- Riprap, bluff stabilization and sand redistribution

Facilities

- Generators, transfer switches and infrastructure being readied
- City facilities are being prepared for El Niño as well



Planned and On-Going City Operations

PUBLIC WORKS STREETS AND DRAINAGE OPERATIONS



Sand Redistribution Operation at the Beach



Planned and On-Going City Operations

PUBLIC WORKS STREETS AND DRAINAGE OPERATIONS



Sand Redistribution Operation at the Beach



Planned and On-Going City Operations

PUBLIC WORKS STREETS AND DRAINAGE OPERATIONS



Sand Redistribution Operation at the Beach



Planned and On-Going City Operations



Sand Redistribution Operation at the Beach



Planned and On-Going City Operations

PUBLIC WORKS STREETS AND DRAINAGE OPERATIONS





Planned and On-Going City Operations

PUBLIC WORKS STREETS AND DRAINAGE OPERATIONS





Planned and On-Going City Operations

PUBLIC WORKS STREETS AND DRAINAGE OPERATIONS





Planned and On-Going City Operations

Public Works Forestry





Planned and On-Going City Operations

PUBLIC WORKS FACILITIES



City Hall Gutter Repair



Flanders Mansion Leaky Roof Repair



Planned and On-Going City Operations

PUBLIC WORKS FACILITIES



Fire Station Generator Inspection



Children's Library Roof and Drainage Cleaning



El Nino/Storm Preparedness Checklist for the Community



CARMEL-BY-THE-SEA EL NINO AND STORM READY PREPAREDNESS A Friendly Checklist for Residents and Neighbors

STAY IN THE KNOW

- Sign up for **Alert Monterey County** to get quick texts about storms, floods, and road closures. Just text your **Zip Code** to **65513** or sign up online.
- Keep your phone charged before big storms roll in.

IMPORTANT NUMBERS

- Emergency: 9-1-1
- Police Non-Emergency: (831) 624-6403
- Fire Non-Emergency: (831) 620-2030
- Public Works (storm issues, downed trees, drainage): (831) 620-2070 (Go Carmel)

LOCAL EMERGENCY RADIO STATIONS

- NOAA Weather Radio – KEC49 (Monterey): 162.550 MHz
- NOAA Marine – WWF64 (Coastal Weather): 162.450 MHz
- KRML Community Radio – 94.7 FM / 1410 AM

PG&E EMERGENCY & OUTAGE INFO

- Downed or sparking power lines: Call **9-1-1 first**, then **PG&E at 1-800-743-5000**
- Power outage hotline (24/7): **1-800-743-5002**
- Customer service (non-emergency): **1-877-660-6789**

SANDBAG LOCATIONS

- Vista Lobos Parking Lot (3rd Ave and Torres St.)

- Sunset Center

BEFORE THE STORM

- ☐ Clear leaves and pine needles from gutters and drains.
- ☐ Bring in or tie down patio chairs, umbrellas, or anything the wind might grab.
- ☐ Pick up sandbags early.
- ☐ Charge your phone, chargers, and backup batteries.
- ☐ Look at the trees around your home and report any city tree concerns to Public Works.

YOUR STORM-READY KIT

Think of this as your “Just in Case” box.

- ☐ Essentials
- ☐ Flashlight or headlamp + extra batteries
- ☐ Portable phone charger
- ☐ Hand-crank or battery radio
- ☐ First-aid kit, whistle, gloves
- ☐ Multi-tool for little fixes

Food & Water

- ☐ About 1 gallon of water per person per day (for 3 days)
- ☐ Easy foods: granola bars, canned goods, nuts, fruit pouches
- ☐ Don't forget the pets – food, water, meds

Comfort & Safety

- ☐ Cozy blankets
- ☐ Rain jackets + waterproof boots
- ☐ Dry clothes in a waterproof bag
- ☐ Important papers sealed in plastic

Home Preparation

- ☐ Clear gutters
- ☐ Sandbags
- ☐ Cover and secure outdoor furniture

Car Kit

- ☐ Full tank of gas
- ☐ Jumper cables
- ☐ Blanket, water, small roadside kit

DURING THE STORM

- ☐ Avoid flooded roads – even tiny ones can be deeper than they look.
- ☐ Stay off the beach and bluff paths during high surf.
- ☐ Keep phones charged and unplug delicate electronics.

AFTER THE STORM

- ☐ Check drains around your home and clear any new debris.
- ☐ Stay away from downed power lines (call 9-1-1).
- ☐ Report fallen city trees, blocked streets, or flooding to Public Works.



Prepare Now: Before the Storm

Your household

- Sign up for ALERT Monterey
- Know evacuation routes; pick a meeting place
- Kit: water (1 gal/person/day, 3+ days), food, meds, flashlight, radio, chargers
- Plan for pets and neighbors who need help

Your property

- Clear gutters, downspouts and the drain out front
- Trim weak branches; secure outdoor items
- Pick up sandbags early at **Sunset Center** or **Vista Lobos**
- Check insurance: flood is usually separate, with a typical 30-day wait



Prepare Now: During and After the Storm

During

- **Turn around, don't drown:** never enter floodwater
- Stay off beaches, bluffs and rocks; never turn your back on the ocean
- Stay clear of downed lines; call 911 and PG&E
- Generators and grills outdoors only
- Follow evacuation orders immediately

After

- Wait for the all-clear before returning
- Photograph damage; call your insurer
- Report downed trees, blocked drains, road damage to the City
- Watch for slides, weakened trees and undermined bluffs
- Restock your kit; more storms may follow



Get Alert Messages and EOC

Alerts and the Emergency Operations Center

Get alerts

- **Sign up for ALERT Monterey** (phone, text, email)
- City website, social media, text messaging
- Radio and newspaper updates
- Alerts are tested ahead of the season

The EOC

- Police and Executive set activation triggers
- Tiered activation, from a virtual meeting up to a fully staffed center
- Radio, internet, TV, cellular and satellite backups (Starlink)
- Staff trained in NIMS, with evacuation and road closure plans



Community: Next Steps and Stay Connected

Community

- Sign up for ALERT Monterey
- Pick up sandbags early and prepare your kit
- Attend upcoming workshops and Farmers Market events

Do these three things today

- Sign up for ALERT Monterey
- Build or refresh your kit
- Tell us where you need help





Warming Centers and Looking Out for Each Other

Warming centers

- **Youth Center**
- **Children's Library**
- Generator-backed; openings announced through alerts

Neighbors

- Check on older adults and anyone who relies on power-dependent equipment
- Share alerts and plans



Upcoming Community Meeting and Engagement

Meet us in person

City-led community meeting for El Niño and storm preparedness

October 12, 2026 · Location: **Sunset Center**

- **Farmers Market booth: October 15**
- **CERT-led events: October 17 and 20**

Take-home info

- Residential flyers and neighborhood readiness materials
- Website, social media, radio and newspaper announcements
- Sandbag, drainage and tree safety guidance



Partnerships and Mutual Aid

Mutual aid

- Agreements verified, including CalFire
- Monterey Fire coordination for response and rescue
- Request process and triggers written into the Manual

Requesting State and Federal help

- When City resources are exceeded, requests go up through the County (Operational Area) to Cal OES
- Cal OES can seek Federal support when needed
- Under the State's emergency proclamation, State resources are being staged now

Agency partners

- NOAA / NWS: forecasts and watches
- PG&E: outages and vegetation work
- ALERT Monterey: regional alerts
- Others: **[to be confirmed]**

City Council role

- Briefed on readiness and storm impacts
- Ratifies a local emergency declaration and reviews it regularly
- Approves emergency spending and mutual aid requests as needed



El Nino Operations Funding

Fiscal considerations

Already funded

- FY 2026–27 CIP projects are funded in the adopted budget
- Includes new FY 26–27 projects and carryover from FY 25–26

Not covered

- Additional El Niño emergency work is **not** in the FY 26–27 CIP budget
- The State's El Niño declaration has shifted priorities to accelerated shoreline stabilization

Supplemental funding expected for

- Additional riprap and beach armoring
- On-call contractor installation support
- Specialized delivery and mobilization
- Stabilization measures outside the adopted CIP scope



Conclusion

- The presentation provides essential information and updates on El Niño and storm preparedness, shoreline project priorities, and resource allocations.
- Council direction, feedback, or guidance is welcomed to help prioritize efforts and ensure appropriate resource allocation moving into the El Niño season.



Previous El Nino Events

