

Current events in southern California's marine environment

SCCWRP Commission Meeting

June 5, 2026

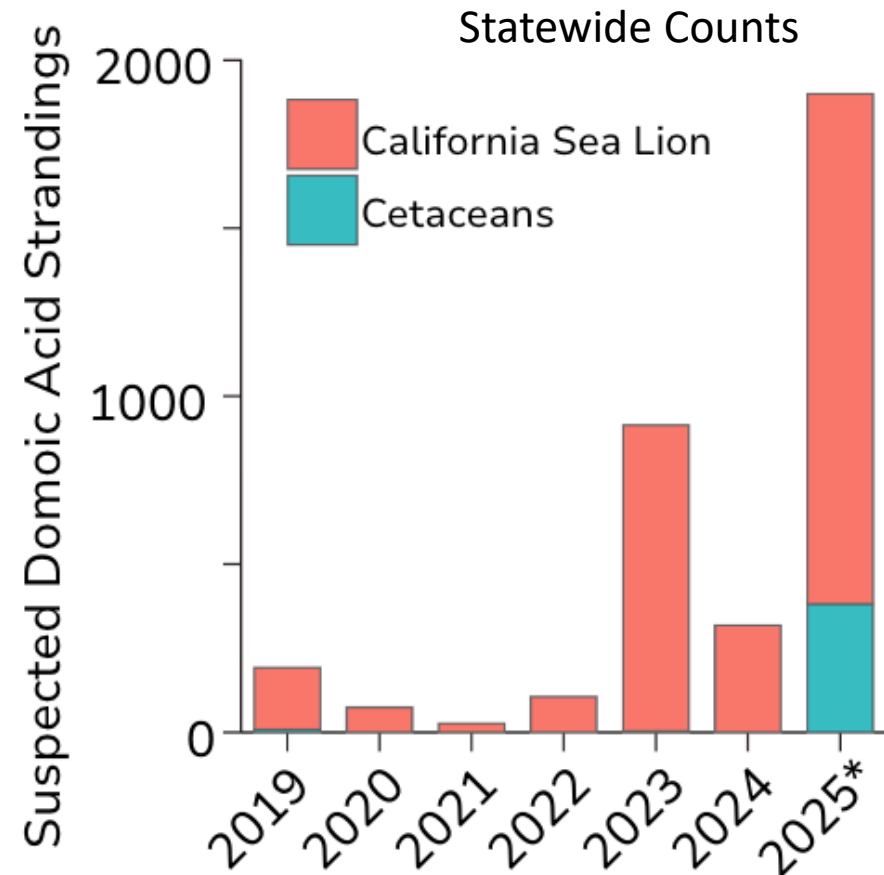
Multiple stressors along our coastline

- Harmful algal blooms
- Avian flu
- Anomalous ocean temperatures

Significant HAB activity recently



- Significant marine mammal impacts for the last 3 years
- 2023 & 2025 were particularly intense bloom years
- Notable HAB fishery closures also occurred
 - Bivalves, anchovy & lobsters



This has been a “quiet” HAB year...so far

- Some minor bloom activity was observed early in February in central California but it has been comparatively “quiet” in southern California
- Stranding networks have reported very few domoic acid related strandings
 - About a dozen reported as of beginning of March
- Important caveat, we aren't out of “bloom” season just yet

H5N1 Avian Influenza detected in California Marine Mammals

- First detection of avian flu in California occurred in February
- 7 Northern elephant seal pups at Año Nuevo breeding colony
- Subsequently, >50 seals, 6 Sea Lions and 1 Sea Otter has tested positive



H5N1 Avian Influenza - what is it?

- Highly contagious zoonotic virus primarily carried by birds
- Causes neurological and respiratory distress
- Primarily transmits from birds to mammals, but mammal to mammal transfer can occur
- Marine mammal outbreaks have occurred in South America associated with mass mortality of sea lions and seals
 - ~47,000 individuals died

Is the avian flu spreading?

- Good News! As of May 12th – outbreak is considered over
 - 30 days passed with no 'new' cases
- Continuing surveillance of mammals via federal-state-academic-NGO partnerships
- Detections were most common in San Mateo County
 - Limited detections in Santa Cruz, Monterey and San Luis Obispo counties
 - Detection in elephant seals (57), sea lions (6) and one sea otter

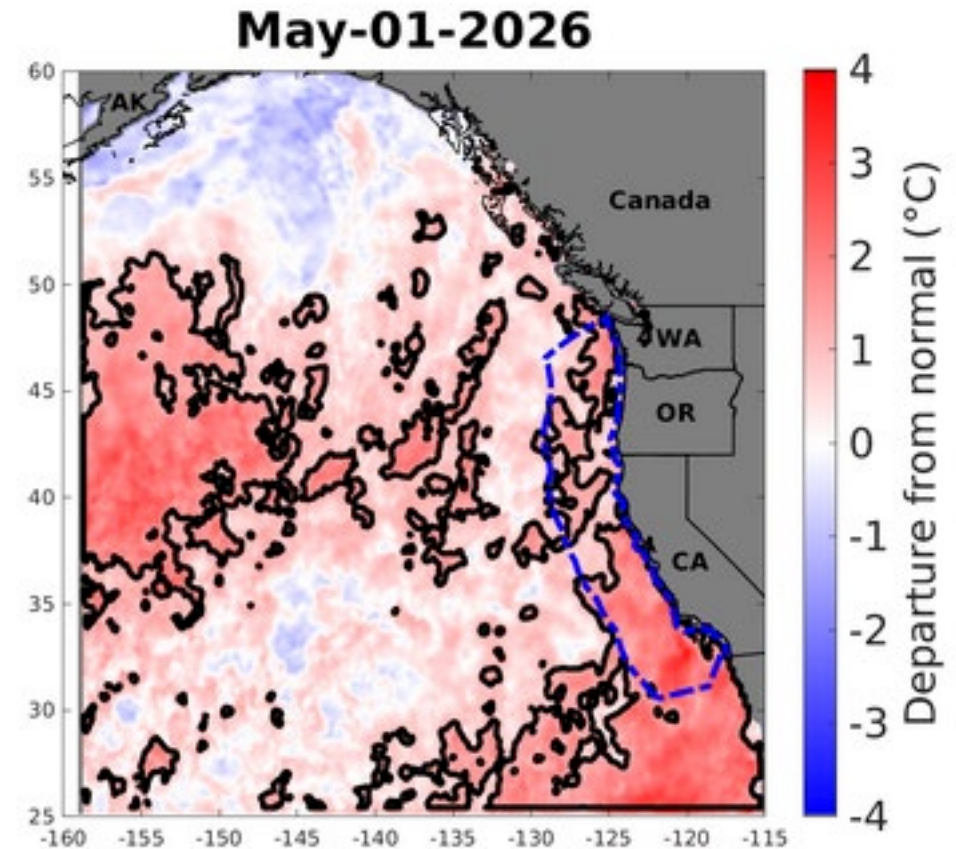


What was done in southern California?

- No cases reached southern California
- Local stranding network members had opportunity to consider how to prepare
 - Conducted enhanced field screening of live stranded animals for symptoms
- Several key needs identified by network
 - Enhanced personal protection equipment
 - Quarantining protocols for high-risk groups
 - Rapid testing high risk animals
 - Protocols for managing contaminated carcasses

California's Current Marine Heatwave

- Persistent marine heatwave since May 2025
- Record size: ~10 million km²
- Conditions now are similar to 1997–98 El Niño and 2014–15 “Warm Blob”
- No signs of conditions returning to “normal” in near future



What are the general effects of heat waves?

- Cascading trophic effects:
 - Reduced upwelling & lower primary production
 - Food limitation and increase in wildlife starvation and stranding events
- Biogeographical effects:
 - Habitat compression
 - Range shifts for many marine species
 - Shifts in HAB dynamics and types

Are we seeing some of these effects?

- Short answer, yes
- Ongoing bird starvation event
 - CDFW ruled out avian flu for current die off
- Increased shark & stingray sightings
 - Juvenile sharks capitalizing on unseasonably warm waters





Questions?

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