



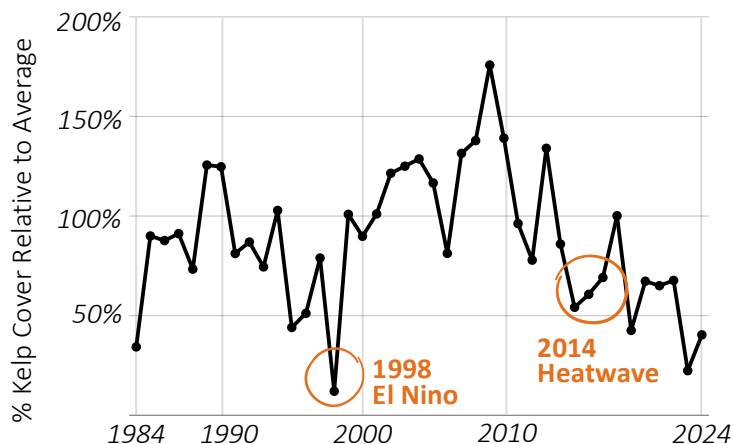
KELP

California Coast and Ocean Report *Status, Progress, and What's Ahead* 2026

Dive into the water off California's coast and you may find yourself in a kelp forest, towering columns of seaweed rising from the seafloor to the surface and sheltering hundreds of species of fish and wildlife. These ecosystems are among the most productive on Earth, and they are deeply woven into California's identity, economy, and cultural heritage. But California's kelp forests are in serious trouble, having shrunk dramatically over the past decade as the ocean warms.

STATUS

In recent years, California has experienced severe **climate-driven declines** in kelp canopy. Overall, kelp canopy has been lower than normal since 2014, when a marine heat wave resulted in dramatic die-offs of kelp across the state. **In 2024, more than 75% of kelp forests were smaller than their long-term average.** However, preliminary data from 2025 indicate that kelp forests are **beginning to recover in much of Central and Southern California.**



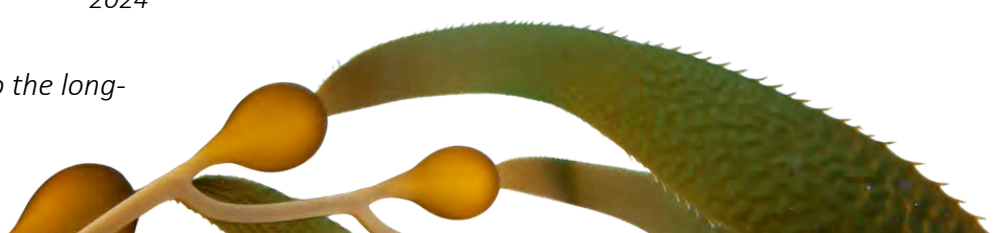
Percent of kelp cover in 2024 relative to the long-term average (1984-2013).

PROGRESS

California has taken bold action in the face of kelp loss, adopting a “learn by doing” approach that meets the urgency of the moment and **investing close to \$11 million in kelp research and restoration** over the last four years. These efforts are filling knowledge gaps to successfully restore kelp ecosystems and build resilience in the face of a changing ocean.

LOOKING AHEAD

Early successes, driven by state investments, will directly inform the development of a statewide **Kelp Restoration and Management Plan – the first plan of its kind in California history.** Additionally, Proposition 4, the 2024 Climate Bond, earmarked **\$19 million specifically for kelp protection and restoration** – a landmark investment that will drive progress on the **state’s goal to restore 2,000 acres of kelp** by 2030.





STATUS VARIES ALONG THE COAST

2024
Status

5-Year
Trend

Region

-96%



NORTHERN CALIFORNIA

Kelp cover in **2024 was the second lowest in four decades** and lower than any other region. Substantial declines started in 2014 when a marine heatwave coincided with the **loss of sea stars and an explosion in kelp-eating purple sea urchin** populations. Generally, kelp forests in this area have yet to recover.

-53%



CENTRAL CALIFORNIA

2024 was the third-worst year on record, with kelp cover at **half of the long-term average** size. Kelp cover has been **declining since 2019**, although the cause is still unclear.

-77%



SOUTHERN CALIFORNIA

Kelp cover **improved compared to 2023, which was one of the worst years on record**, likely due to early-season storms.

+7%



CHANNEL ISLANDS

Kelp cover in this region has increased over recent years. The southern Channel Islands, such as **San Clemente and Catalina, remain most abundant**. However, the northern islands, such as **San Miguel and Santa Rosa, are experiencing declines** in kelp cover.

Percentages are 2024 kelp cover compared to the long-term average (1984-2013). Arrows are the direction of change over the last five years (2020-2024).



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