

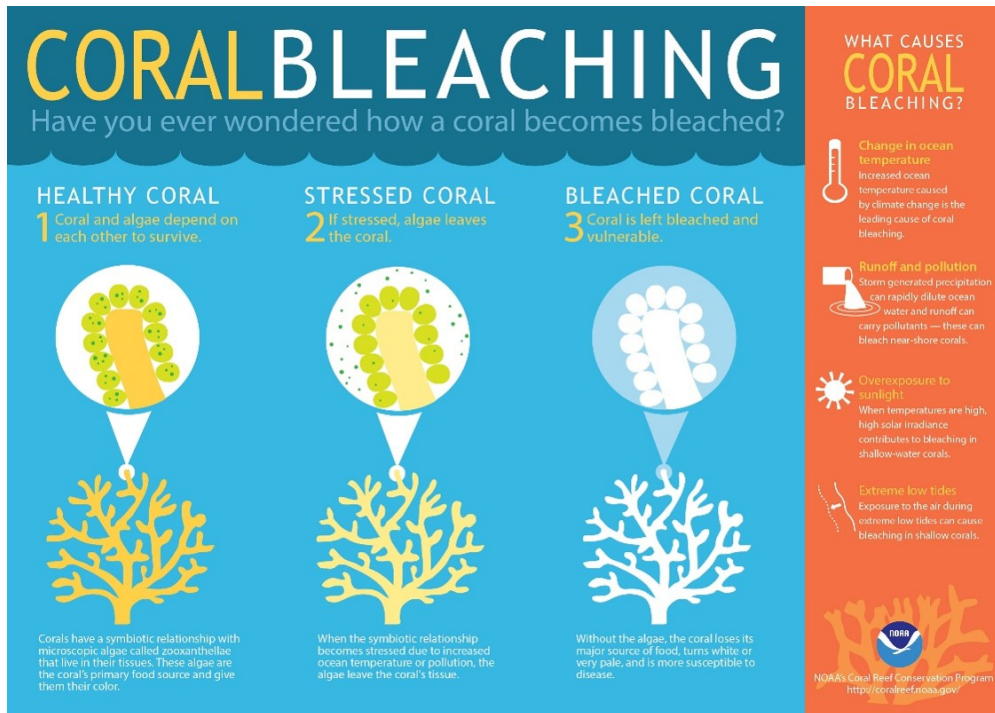
Global Coral Bleaching Event

Prelims: Current events of national and international importance | Environment

Why in News?

Recently, Researchers from the National Oceanic and Atmospheric Administration (NOAA) Coral Reef Watch stated the 4th global coral bleaching event as the fastest and widest on record.

- **Corals** - They are **tiny marine invertebrates (polyps) that build reefs.**
- It covers 1% of the ocean floor yet supporting 1/4th of marine life by providing food, shelter, and breeding grounds.
- **Coral Bleaching** - It occurs when corals are stressed by changes in conditions such as *temperature, light, or nutrients*, they expel the symbiotic algae (zooxanthellae) living in their tissues, causing them to turn completely white.
- Coral bleaching is not only caused by warm water; cold stress can also trigger it, making corals more vulnerable to disease just like higher temperatures do.



Key Highlights

- **Scale of the Event** - The 4th global coral bleaching ended by mid-2025, affecting 84% of reefs across 83 countries.
- **Concluding Phase** - Severe bleaching in Western Australia (early 2025) marked the end.
- **Defining Global Events** - Scientists noted difficulty in fixing start/end points as reefs bleach nearly annually.
- **Heat Stress** - Despite decline, sea surface temperatures remain far above past levels.
- **Thermal Tipping Point** - Warm water coral reefs in tropical and subtropical regions undergoing unprecedented die off.
- **Global Tipping Points Report 2025** - Warned rising greenhouse emissions push world toward dangerous new reality near 1.5°C threshold.
- **El Niño Risks Ahead** - NOAA warned expected [El Niño](#) could raise ocean temperatures and trigger renewed bleaching.
- **Regional Outlook** - NOAA predicts bleaching risk in North Pacific (Hawai'i), Florida, and Caribbean during upcoming summer.
- **Human Livelihoods at Risk** - Nearly one billion people dependent on reefs for food, income, and coastal protection are threatened.
- **Conservation Framework** - NOAA's Coral Reef Conservation Program (CRCP), under the Coral Reef Conservation Act, coordinates protection, conservation, and restoration of reefs.

Reference

[Down to Earth | Coral Bleaching](#)

