

Fiji - Southern Lau (Kabara / Fulaga)

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Regional summary of 11 dive sites. Figures are averages across the sites that report them (n = sites with a value); each site's own page has its individual values. Part of the Fiji - Lau overview. Island summaries: Fulaga, Kabara.

0 — 5

Coral Health Index: TBD

COUNTRY

Fiji

SITES

11

each linked below

HARD CORAL COVER (REGIONAL MEAN)

39% ± 13% (std. dev.)

n=11. range 19–62%

WATER TEMP. DURING SURVEYS (REGIONAL MEAN)

26.4°C

n = 11 of 11 sites; surveyed Jun 2013; all are station CTD values, not dive readings

CORAL HEALTH INDEX (REGIONAL MEAN)

not yet scored

n = 0 of 11 sites

MOST RECENT WATER TEMPERATURE RECORD

25.8°C

26 Oct 2026 · Fiji

MOST RECENT HEAT STRESS RECORD

0.0°C-weeks

26 Oct 2026 · No heat stress

MEAN ANNUAL MAX DEGREE HEATING WEEKS (DHW), LAST 5 YEARS

8.9°C-weeks

2021–2025 · Fiji

HIGHEST ANNUAL HEAT STRESS

16.7°C-weeks 🔥

in 2026 (to date, 26 Oct) · Fiji

SEVERE HEAT-STRESS YEARS

11

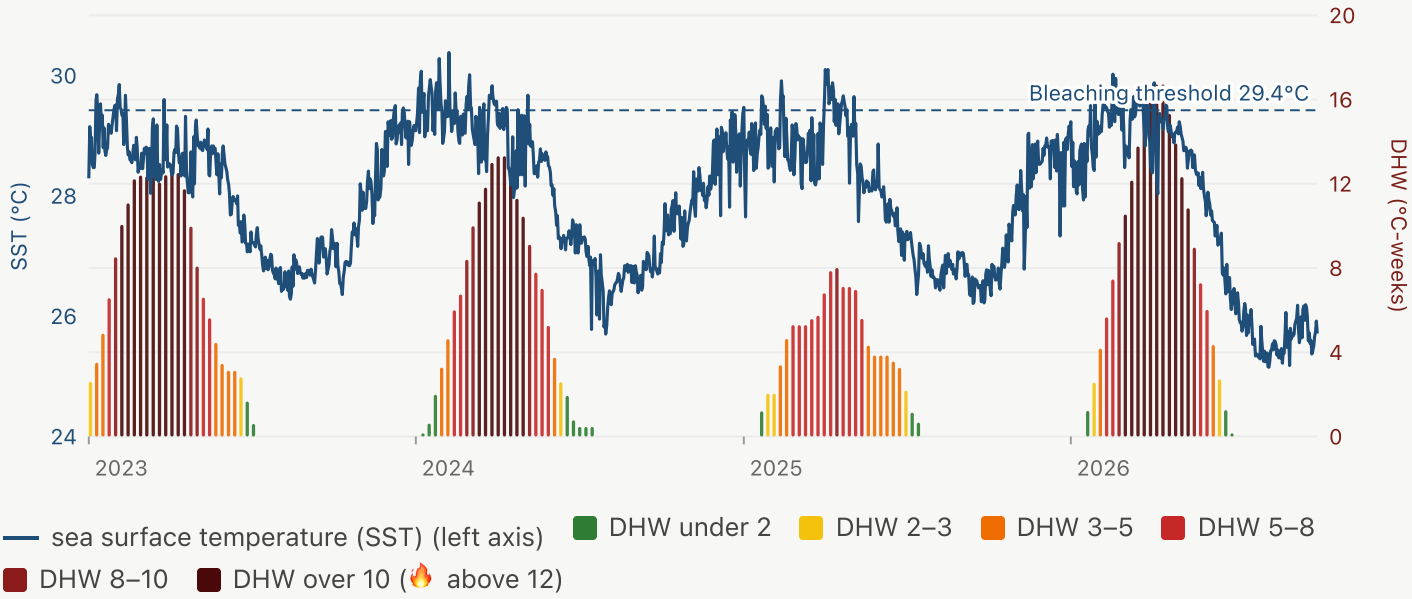
1985–2025 · 6 in the last 10 years

Heat-stress figures: NOAA Coral Reef Watch — Fiji 5-km virtual station. Each pill links its source record and carries the values behind it.

REGIONAL SUMMARY

Deep fore-reef spur-and-groove and walls at Fulaga and Kabara, plus coral pinnacles in Fulaga's enclosed lagoon, were surveyed in June 2013. At Kabara, FJKA32 held 62% coral, while FJKA30, FJKA33, and FJKA34 held 19-25%, with algae outweighing coral.

Heat stress



Daily SST (line) and weekly maximum Degree Heating Weeks (bars), Jan 2023–Oct 2026, NOAA Coral Reef Watch 5-km Fiji virtual station. Dashed line: bleaching threshold (maximum monthly mean 28.4°C + 1°C). DHW ≥ 4: bleaching likely; ≥ 8: severe bleaching and mortality likely. A bar is drawn only where DHW exceeds zero, so a stretch with no bar is accumulated heat stress of zero, not missing data — the SST line runs the full period.

Long-term record: 11 years from 1985 through 2025 reached 8 or more °C-weeks at NOAA's Fiji station. Download the annual DHW data (CSV).



11 sites in this region — click a marker to open that site.

Read this summary in: English | Vosa Vakaviti

Regional setting

The Lau Islands form Fiji's eastern margin, lying along the crest of the Lau Ridge and separated by the Nanuku Channel from the Fiji Platform, which carries the two main islands. Spalding et al. (2001) describe a north-to-south shift along the chain: high volcanic islands prevail in the north, carbonate islands dominate farther south, and atolls and near-atolls occur throughout. The atlas does not mention Kabara or Fulaga by name. Its examples from the far south of the group are Vatoa, a limestone high island ringed by its own barrier reef, the atoll of Vuata Vatoa, and, farther south again, Oni-i-Lau, a small cluster of islands inside a barrier reef. Spalding et al. (2001) put Fiji's reef area at about 10,020 km² nationwide and record some 298 scleractinian coral species, but they caution that, outside the well-studied areas near Suva and on the Great Astrolabe Reef, most Fijian reefs remained poorly known. They also note that the bump-headed parrotfish (*Bolbometopon*) had gone uncaught in Lau for at least ten years and might have been locally extirpated, and that a warming event early in 2000 bleached 50–100% of corals across wide areas of Fiji, many of which later died.

The sources do not revisit the southern Lau after 2000, so recent conditions are regional. According to Wilkinson (2006), who summarized the 2004 Southwest Pacific assessment covering Fiji, reefs across the region were broadly in good condition, but the extensive bleaching of 2000–2002 had left a mixed record, with full recovery on some reefs and none on others. Human activities and cyclones were the leading threats, crown-of-thorns starfish and disease secondary ones, and overexploitation and pollution clustered around settlements and lagoons. Souter et al. (2021) note that coral cover in the Fiji Islands subregion increased from 2002 to 2008, while Pacific-wide cover declined from about 37% before 1998 to 31% in 2019, chiefly because of bleaching, and fell fastest between 2015 and 2017.

Overview

This unit covers six Global Reef Expedition stations at Fulaga, a raised limestone island with an enclosed lagoon, and five at Kabara, both in southern Lau. Fulaga was surveyed on 11 and 12 June 2013 and Kabara on 13 and 14 June. Maximum dive depths run from 4 m at FJFU29 (Anderson's own sampling dive) to 30.2 m at FJKA33. FJFU28 and FJFU29 lie inside Fulaga's enclosed lagoon: at FJFU28 large coral pinnacles rise from a sediment-dominated floor, their tops dominated by *Pocillopora*, *Acropora*, and *Stylophora*, and at FJFU29 Anderson sampled three *Pocillopora acuta* colonies.

The Fulaga fore reef is described as spur-and-groove, with monospecific stands of plating and foliaceous *Pachyseris*, *Leptoseris*, *Montipora*, and *Merulina* on gentler slopes and encrusting, laminar growth where the slope approaches vertical. FJFU25 is a near-vertical face with foliose corals under overhangs, a single sea fan, and table and branching *Acropora* packed along the reef edge. Fulaga cover ran from 35% at FJFU25 to 55% at FJFU26, with 50% at FJFU29, in the lagoon, and 44% on the lagoon pinnacles at FJFU28.

Across the unit, cover ranged from 19% at FJKA34 to 62% at FJKA32, both at Kabara. The terrace at 5-12 m is spur-and-groove, with sediment building up between the spurs, and below about 15 m the slope becomes very steep, with small to medium acroporids and *Pocillopora*, high coralline algae cover, and little macroalgae. Cover was 62% at FJKA32 and 36% at FJKA31, against 19% to 25% at FJKA34, FJKA33, and FJKA30, where algae covered 57% to 72% of the benthos; at FJKA34 algae held nearly four times the substrate coral did. FJKA31 is a structurally complex, coral-packed crest broken by darker rubble ground, and both FJKA31 and FJKA34 feature exceptionally large *Porites* heads.

Island-pooled physiological outlier scores were 4.17 at Fulaga and 3.75 at Kabara on a 0-5 scale (5 = no outliers; Mayfield et al. 2017, PLoS ONE); Kabara's corals with an outlier score came from FJKA31, where 1 of 4 was flagged, and no colonies were sampled at FJKA30. All ten *Pocillopora* colonies Anderson sampled at FJKA31 were partly to fully bleached (20-100% of each colony). The sampling sheet also records one sampled colony at FJFU25 as mostly bleached or very pale, one at FJFU29 as 20% bleached, and one at FJKA34 as 20% bleached at its base, and a small branching colony in one FJFU25 frame is stark white. No crown-of-thorns or disease is recorded.

Highlights

- 62% coral on the Living Oceans Foundation Global Reef Expedition (LOF-GRE) *in situ* benthic transect at FJKA32, on Kabara's fore reef. 
- 55% on the Fulaga spur-and-groove fore reef (FJFU26).  photo: Fiji - Fulaga (FJFU24)
- 50% coral at FJFU29, inside Fulaga's enclosed lagoon. 
- Coral pinnacles inside Fulaga's enclosed lagoon, topped with *Pocillopora*, *Acropora*, and *Stylophora*, at 44% cover (FJFU28).
- A near-vertical wall with foliose corals under overhangs (FJFU25). 

- Cover of 19% to 25% at FJKA34, FJKA33, and FJKA30 on Kabara's fore reef, where algae covered 57% to 72% of the benthos. 

Notable observations

- Fiji - Kabara (FJKA31): Bleaching: Anderson's sampling sheet records all ten Pocillopora colonies sampled here, on both dives, as partly to fully bleached (20-100% of each colony). Island-level molecular screening flagged 1 of the 4 Kabara corals with an outlier score, all from this station. 
- Fiji - Fulaga (FJFU25): One small branching colony in the overhang frame is stark white - either freshly bleached or recently dead; a single colony in a single frame. Anderson's sampling sheet records one colony sampled here as mostly bleached or very pale. 

▼ Sites in this region (11)

- Fiji - Fulaga (FJFU24) — 43% coral cover
- Fiji - Fulaga (FJFU25) — 35% coral cover
- Fiji - Fulaga (FJFU26) — 55% coral cover
- Fiji - Fulaga (FJFU27) — 37% coral cover
- Fiji - Fulaga (FJFU28) — 44% coral cover
- Fiji - Fulaga (FJFU29) — 50% coral cover
- Fiji - Kabara (FJKA30) — 25% coral cover
- Fiji - Kabara (FJKA31) — 36% coral cover
- Fiji - Kabara (FJKA32) — 62% coral cover
- Fiji - Kabara (FJKA33) — 24% coral cover
- Fiji - Kabara (FJKA34) — 19% coral cover

Data are from the Khaled bin Sultan Living Oceans Foundation Global Reef Expedition and Coral Reef Diagnostics.

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References

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