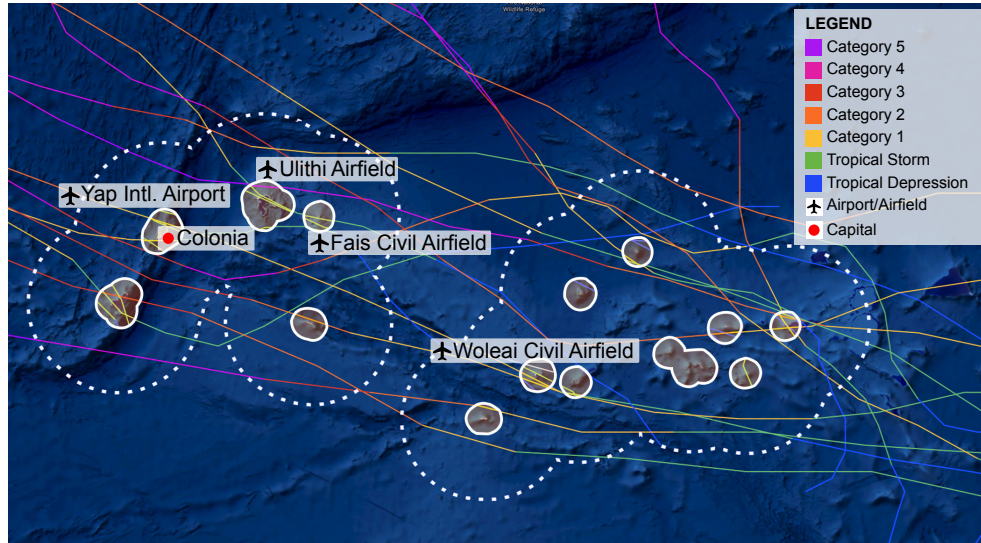


YAP STATE HAZARDS & DISASTER MANAGEMENT

APRIL 2026

Yap State faces recurring coastal flooding, drought, and tropical cyclones. Preparedness for and response to hazard events are complicated by Yap's geographic dispersal, limited infrastructure, and reliance on subsistence agriculture. Approximately 70% of households are located within 200 meters (656 feet) of the shoreline and are highly exposed to impacts from storm surge and coastal inundation. Yap's disaster management (DM) system is guided by the Yap State DM Plan and relies on state and municipal coordination, with support from national and international partners.



Historic Tropical Cyclone Tracks around Yap State (2000-2025); Source: NOAA.

- **Frequent Tropical Cyclone Impacts:** While Yap State is exposed to multiple hazards, including coastal flooding, drought, and epidemic disease, tropical cyclones are the most frequent and destructive hazard events.
- **Geographic Dispersal:** Long distances between islands complicate logistics, communication, and delivery of relief.
- **State and Municipal DM Structure:** Yap's system is guided by comprehensive state-level plans, and every outer island has designated officials who coordinate community-based DM.
- **Reliance on External Support:** Large disasters often require assistance from FSM national authorities, the United States, and regional or international partners.

State Facts

Yap State is one of the four states of the Federated States of Micronesia (FSM), located in the western Pacific Ocean.



Capital: Colonia



Total Population: 11,376 (2010*)

- **Yap Main Islands:** 7,371
- **Neighboring Islands:** 4,006

*2010 was the last national census conducted in FSM



Total Land Area: 102 square kilometers (39 square miles)

- **Total Islands:** 134 (22 inhabited)



State Government: Executive, Legislative, Judicial, and Traditional



Local Government:

21 Municipalities and two councils of chiefs: Council of Tamol (Outer Islands) and Council of Pilung (Yap Main Islands)



Languages: Yapese, Ulithian, Woleaian, Satawalese, and English



Airports & Civic Airfields:

- **Yap International Airport**
Runway: 6,000 feet
- **Fais Civil Airfield**
Runway: 3,000 feet
- **Uliithi Civil Airfield**
Runway: 3,000 feet
- **Woleai Civil Airfield**
Runway: 3,000 feet

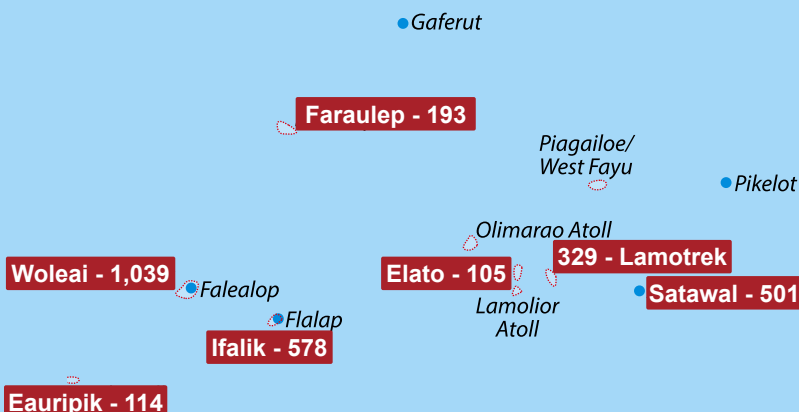


Yap State Vessels:

- Hapilmohol-1
- Hapilmohol-2



YAP POPULATION COUNT (2010*)



HAZARDS

Yap State is exposed to tropical cyclones, coastal flooding, disease outbreaks, and drought, and there is some seismic risk.



Tropical Cyclones

- **Frequency:** The most frequent and destructive hazard, tropical cyclones have led to five disaster declarations in the past 25 years.
- **Impact:** High winds, storm surges, and heavy rainfall cause widespread destruction to homes, infrastructure, and crops. Coastal flooding and saltwater intrusion can contaminate water supplies and destroy food sources.



Coastal Flooding & King Tides

- **Frequency:** Regular, severe coastal flooding is often linked to storm surges or extraordinarily high tides.
- **Impact:** Saltwater intrusion reduces agricultural productivity. Coastal erosion threatens homes and infrastructure.



Disease Outbreaks

- **Frequency:** Disease outbreaks can follow other disasters due to stagnant water, crowded shelters, and disrupted sanitation systems.
- **Impact:** Outbreaks of vector- and water-borne diseases like dengue, leptospirosis, and Zika can overwhelm Yap's limited healthcare infrastructure, particularly in outer islands.



Drought

- **Frequency:** Severe drought tends to correlate with El Niño events.
- **Impact:** Prolonged dry conditions reduce water supplies, particularly in outer islands reliant on rainwater catchment systems. Crop failures lead to food insecurity and malnutrition.



Earthquake

- **Frequency:** Seismic events are infrequent, and there is no history of major damage. Earthquakes are possible due to Yap's proximity to tectonic plate boundaries.
- **Impact:** There is a potential for structural damage to homes and public buildings, with secondary risks from tsunamis.

El Niño – Southern Oscillation (ENSO)

ENSO is a recurring cycle characterized by periodic warming (El Niño) and cooling (La Niña) of ocean temperatures in the equatorial Pacific; it causes changes to rainfall, air and ocean temperatures, tropical cyclone risk, and trade winds. During El Niño events, rainfall generally starts declining in August, with dryness increasing through October and November and peaking in January. Rainfall can be 50-60% below normal through April. El Niño tends to increase the number of tropical cyclones, making for increased risk of tropical cyclone activity from March-July, but a reduced risk from October-December.



DISASTER PROFILE (2000-2025)

The impacts of disasters over the past 25 years point to the types of relief and recovery support that Yap State may need.



March 2002: Typhoon Mitag brought wind, rain, tidal surges, and flooding, prompting requests for national assistance and emergency food deliveries to outer islands.



November 2003: Typhoon Lupit's winds and waves destroyed crops, contaminated drinking water, and damaged infrastructure.



April 2004: Typhoon Sudal submerged coastal areas, damaged infrastructure, including the State Hospital, and displaced 900 people.



May-December 2004: A dengue fever outbreak infected 658 people.



April 2007: The first confirmed transmission of Zika virus outside of Africa and Asia, with 49 confirmed cases.



July 2007: An El Niño-related drought reduced rainfall and compromised water supplies.



December 2008: Extremely high tides and storm-driven waves flooded low-lying areas, uprooted trees, and damaging infrastructure and crops; FSM Government and U.S. agencies supported relief efforts.



December 2009: High tides and strong wave action flooded coastal areas, where infrastructure and crops were damaged; food and water relief supplies were mobilized.



2010-2011: An El Niño event caused severe drought, depleting water supplies and damaging food crops.



November 2011: Heavy rainfall led to a dengue fever outbreak with nearly 850 cases and 2 deaths; in addition to national and international support, the U.S. military transported IV fluids to Fais.



November 2013: Typhoon Haiyan inundated outer islands; homes, infrastructure, and crops were damaged.



November-December 2014: Typhoon Hagupit caused significant wind and flooding damage to food crops and infrastructure on outer islands.



March 2015: Typhoon Maysak's displaced over 1,100 people and destroyed crops and homes, requiring national and international support.



2016: An El Niño event led to drought and widespread crop failures; the Hapilmohol-1 delivered water and food.



February 2019: Typhoon Wupit brought high winds, heavy rainfall, and storm surges; coordinated responses involved state, national, and international support.



August 2019: Concurrent dengue and leptospirosis outbreaks led to 545 suspected dengue cases and 515 suspected leptospirosis cases; U.S. agencies provided health staff and international agencies distributed health supplies.



April 2020: Severe drought conditions damaged crops and water supplies after months of minimal rainfall.



April 2024: An El Niño event caused severe drought, impacting water supply, agriculture, and public health; water and aid were delivered to outer islands via relief voyages.



Yap State's DM framework is guided by the Yap State DM Plan, the Standard Operating Procedure for Emergency and Disaster Response, and the Joint State Action Plan for Disaster Risk Management and Climate Change. These documents emphasize coordination, traditional leadership, and community-based approaches.

Governor of Yap State

- Leads state DM efforts; declares emergency, and requests national assistance, when needed
- Activates warnings and the Governor's Disaster Committee (GDC) for interagency coordination

Office of Planning and Budget (OPB)

- Yap State's disaster response focal point, under the Governor's direction
- Director - Oversees State Disaster Coordinating Office; serves as Secretary of the GDC
- State Disaster Coordinating Officer (DCO) - Implements all emergency and disaster-related functions assigned by the Governor; acts as the coordinator of the EOC or Command Post; maintains and updates the Yap State DM Plan; develops and coordinates public awareness and training

Governor's Disaster Committee (GDC)

- Comprises State government department and office heads; it facilitates interagency coordination and advises on resource allocation

State Disaster Coordination Team (SDCT)

- Comprises representatives from State departments and partner organizations
- Assists the DCO in response planning and securing resources for emergency operations

Neighboring Island Communication Officers (NICO)

- Designated by traditional chief as the main point of contact between the community and the State EOC
- Operates outer-island radio to receive warning announcements from the EOC and disseminate warnings to the community and conducts Initial Damage Assessments and reports to the DCO

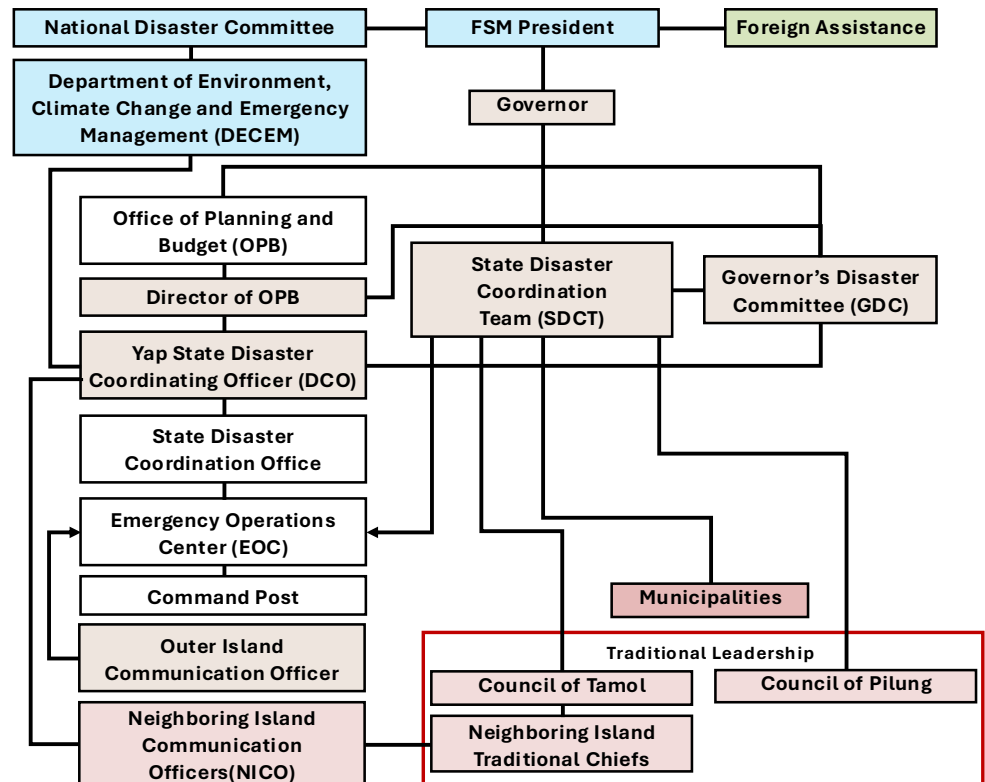
Outer Island Communication Officer

- Sits within the Outer Island Affairs Office of the Governor's Office; point of contact between the State EOC and neighboring island communities
- Reports to the EOC and communicates with NICO's when a watch is announced

Emergency Operations Center (EOC), Command Post, and Disaster Coordination Office

- EOC – The EOC coordinates multi-agency responses for widespread emergencies; located in Colonia
- Command Post – On-site coordination location for isolated or localized incidents; DCO may coordinate response from the Command Post and designate an assistant to oversee the EOC
- Disaster Coordination Office – Within the OPB; when the EOC is deactivated and recovery begins, the DCO coordinates from the Disaster Coordination Office

- Yap State DM Plan (2024) – Provides overarching framework; defines roles, responsibilities, and procedures to mitigate risk and manage emergencies
- Yap State Standard Operating Procedure for Emergency and Disaster Response (2017) – Outlines detailed operational response protocols; specifies procedures for activating the Emergency Operations Center (EOC) and conducting damage assessments
- Yap State Joint State Action Plan for Disaster Risk Management and Climate Change – Integrates disaster risk reduction and climate adaptation strategies into long-term development planning



Yap State Disaster Coordination Structures

Yap State cannot directly request international assistance. International assistance requests are coordinated through a process that begins at the state level and escalates to the national government. If the disaster surpasses FSM's national capacity, the FSM President formally requests international assistance. The FSM national government coordinates incoming support, whether from bilateral partners or multilateral mechanisms. Responders may include:

- The United States and other bilateral partners
- United Nations entities
- The International Red Cross and Red Crescent Movement
- Non-government and non-profit groups – e.g., the Salvation Army and Catholic Relief Services

Despite the robust framework for requesting international assistance, challenges remain. Yap's geography makes the delivery of aid logistically complex and time-consuming. Limited communication and transport infrastructure can hinder effective coordination among municipal, state, national, and international actors.

U.S. ASSISTANCE

FSM, a sovereign nation in free association with the U.S. under the COFA, receives U.S. economic assistance, defense, and disaster response support, including access to federal disaster aid. The Department of State is the lead federal agency (LFA) for U.S. Government (USG) foreign disaster response. Other federal agencies may contribute resources following a U.S. PDD. In Yap State, U.S. assistance has included emergency supplies during droughts and logistical support.

The Disaster Assistance Emergency Fund (DAEF) is a joint U.S./FSM fund established under the COFA. Each year, the U.S. Government contributes US\$200,000 and FSM matches the contribution. The Fund is reserved for disaster situations. It may be accessed to account for all response-related expenditures for a nationally declared State of Emergency. The FSM President approves withdrawals from the DAEF up to US\$50,000. For withdrawals greater than US\$50,000, the U.S. Chief of Mission must concur with the withdrawal.



U.S. Coast Guard Conducts Medical Evacuation and Delivers Drought Relief in Woleai, Yap; Photo via DVIDS / U.S. Coast Guard Forces Micronesia

Disaster Response and International Assistance for Typhoon Maysak (2015)

Local and National Response

- On 1 April, Yap's Governor declared a State of Emergency, followed by a Presidential Emergency Declaration. These declarations activated national and state disaster response mechanisms.

U.S. Assistance

- On 2 April, the U.S. Ambassador to FSM also declared a disaster. On 8 April, in collaboration with FSM officials, a USG team initiated a preliminary damage assessment and noted the destruction of homes, public infrastructure, crops, and rainwater catchment systems.
- On 28 April, the U.S. President issued a Presidential Disaster Declaration (PDD), enabling U.S. federal disaster assistance under the Compact of Free Association (COFA).

Other International Assistance

- The International Organization for Migration (IOM) and the Micronesia Red Cross mobilized relief in coordination with Yap State and FSM national authorities.
- On 9 April, a United Nations Disaster Assessment and Coordination (UNDAC) team arrived in FSM to help establish a coordinated framework for international and regional assistance.

Sources:

Australian Broadcasting Corporation. "Dengue epicentre moves from Marshalls to Yap." 16 November 2011. <https://reliefweb.int/report/marshall-islands/dengue-epicentre-moves-marshalls-yap>

Catholic Relief Services. "Micronesia." <https://www.crs.org/where-we-work/asia/micronesia#section-crs-in-micronesia>

Centers for Disease Control and Prevention. "Morbidity and Mortality Weekly Report: Notes from the Field: Interpretation of Rapid Diagnostic Tests for Leptospirosis During a Dengue Outbreak – Yap State, Federated States of Micronesia, 2019." 4 December 2020. <https://reliefweb.int/report/micronesia-federated-states/morbidity-and-mortality-weekly-report-notes-field-interpretation-rapid-diagnostic-tests-leptospirosis-during-dengue-outbreak-yap-state-federated-states-micronesia-2019-december-4-2020>

Duffy MR, Chen TH, Hancock WT, et al. "Zika virus outbreak on Yap Island, Federated States of Micronesia." *The New England Journal of Medicine*. 2009 Jun;360(24):2536-2543. DOI: 10.1056/nejmoa0805715. PMID: 19516034.

Durand MA, Bel M, Ruwey I, et al. "An outbreak of dengue fever in Yap State." *Pacific Health Dialog*. 2005 Sep;12(2):99-102. PMID: 18181500.

East-West Center. "Micronesia: Relief agency says hundreds still in Yap shelters." 22 April 2004. <https://reliefweb.int/report/micronesia-federated-states/micronesia-relief-agency-says-hundreds-still-yap-shelters>

El Niño and its Impacts on Federated States of Micronesia – Yap and Chuuk. NOAA, November 2015. <https://reliefweb.int/report/micronesia-federated-states/el-ni-o-and-its-impacts-federated-states-micronesia-yap-and-chuuk>

Federated States of Micronesia Government, Federated States of Micronesia Disaster Management Plan (FSM Department of Environment, Climate Change, and Emergency Management, 2016).

FSM Division of Civil Aviation. Accessed 28 March 2026. <https://tci.gov.fm/civilaviation/>

FSM Government. "Dengue Virus Type-3 Outbreak, Yap State: Situational Report #8." 19 September 2019. <https://reliefweb.int/report/micronesia-federated-states/dengue-virus-type-3-outbreak-yap-state-situational-report-8-epi>

Haglegam, John. "Traditional Leaders and Governance in Micronesia." Habel Institute, 1998. https://habelinstitute.org/wiki/Traditional_Leaders_and_Governance_in_Micronesia#Yap

International Federation of Red Cross and Red Crescent Societies. "Federated States of Micronesia: Typhoon Maysak Emergency Plan of Action DREF operation no MDRFM001." 4 April 2015. <http://reliefweb.int/report/micronesia-federated-states-micronesia-typhoon-maysak-emergency-plan-action>

Marianas Variety. "FSM's Mori declares national emergency." 5 January 2009. https://www.mvariety.com/news/local/fsms-mori-declares-national-emergency/article_78a3722d-88bf-5156-9dcd-de0094bb14ae.html

Marianas Variety. "Yap declares state of emergency due to dengue." 11 December 2011. https://www.mvariety.com/news/yap-declares-state-of-emergency-due-to-dengue/article_f9b9920e-bd14-5711-8740-80802f0fe29.html

Marianas Variety. "Yap reports 851 cases of dengue fever." 20 December 2011. https://www.mvariety.com/news/yap-reports-851-cases-of-dengue-fever/article_dbf755f1-74cb-53ef-8752-1c6e4bb0c74.html

McClure, Joyce. "Yap's broken vessel leaves Outer Islands' residents marooned." *Pacific Island Times*, 4 October 2020. <https://www.pacificislandtimes.com/post/2020/10/04/yaps-broken-vessel-leaves-outer-islands-residents-marooned>

"MV Hapimohol 2: When Will Yap's Primary Vessel Return to Service After Unexpected Engine Failure?" *Yap State Government*, 17 October 2024. <https://www.yapstate.gov.fm/post/mv-hapimohol-2-when-will-yap-s-primary-vessel-return-to-service-after-unexpected-engine-failure>

Radio New Zealand. "Little water left as Micronesia struggles with drought." 1 April 2016. <https://www.rnz.co.nz/international/pacific-news/300374/little-water-left-as-micronesia-struggles-with-drought>

Shigetani, Marilyn. "Federated States of Micronesia: Preliminary Damage Assessment High Tide Event, December 7-12, 2008. USAID and FEMA, 26 January 2009. https://www.preventionweb.net/files/27083_fmfpdareportofsmgovernment.pdf?startDownload=true

USAID. "Factsheet #1, Fiscal Year (FY) 2012: Federated States of Micronesia and the Republic of the Marshall Islands." 20 January 2012. <https://reliefweb.int/report/marshall-islands/federated-states-micronesia-and-republic-marshall-islands-fact-sheet-1>

Yap State Government. *Yap State Disaster Management Plan (2024)*

Yap State Government. *Yap State Standard Operating Procedure for Emergency and Disaster Response (2017)*. https://pacificdata.org/data/dataset/emergency-division6b09fdb-c0d0-44e3-9be9-52defaaf782d/resource/11713fd5-c106-452c-8db5-11e13c70d12?inner_span=True

"Yap State Joint State Action Plan for Disaster Risk Management and Climate Change." Secretariat of the Pacific Community (SPC), 2016. <https://www.spc.int/digitalibrary/get/nbzyz>

"Yap Basic Tabulation – 2010 Census of Population and Housing." FSM Department of Resources & Development, accessed 20 March 2026. <https://stats.gov.fm/states/yap/>