



Mariana Trench Marine National Monument

Planning Update Number 6

June 2024



A chimera is a creature of the deep. NOAA Office of Ocean Exploration and Research, 2016 Deepwater Exploration of the Marianas.

The Monument Management Plan is finalized!

The U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration (NOAA), in cooperation with the Commonwealth of the Northern Mariana Islands (CNMI) Government, have finalized the Monument Management Plan (MMP) for the Mariana Trench Marine National Monument (Monument). This plan defines agency management roles and responsibilities and lays out goals, objectives, and planned activities for the next 15 years.

The Monument was established by President George W. Bush with Presidential Proclamation 8335. The MMP was developed in accordance with the Proclamation, and provides for protecting the marine ecosystems, geologic features, and life forms in the Monument; ensuring traditional access by indigenous persons for culturally significant subsistence, cultural, and religious uses; promoting scientific exploration and research; public education and outreach programs; and protecting and recovering native, threatened, and endangered species.

There are 11 program area action plans. Each Action Plan includes objectives and a series of

strategies and activities designed to help meet the management goals for the MMP.

Many dedicated people helped to develop the MMP, and we thank all of you who participated in our planning process and provided valuable comments to help improve the plan.

Electronic copies of the final MMP are available at <https://www.fws.gov/media/mariana-trench-marine-national-monument-management-plan>

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Public Involvement and Changes Made to Management Plan

Community input was obtained at multiple in-person scoping meetings on Saipan, Rota, Tinian, and Guam; coordination with the MTMAC; public review and comment on the Draft MMP/EA; and virtual public meetings. The details of public comments and agency responses are described in Appendix 3 of the final EA.

The following updates were made to the MMP in response to public comments:

Science: The Physical Environment and Biology chapters have been updated to include current coral, fish, invertebrate, algae, oceanography surveys, and climate change information.

Cultural Heritage: The Carolinian language is known as Refaluwasch by native speakers and language references were updated throughout the MMP. The vision statement now includes the Refaluwasch version. CMH Activity 1.5 has been added to the Cultural and Maritime Heritage Action Plan: *Develop a culturally appropriate and inclusive naming process.*

Permits: We added a new activity to the Coordination of Management, Access and Permitting Action Plan: 3.2. *Develop an information webpage to post information on the fishing, research, and other permitted uses.*

Research: A new activity was added to the Exploration & Research Action Plan: E&R Activity 3.5: *Pursue opportunities to support marine science career paths for local students.*

Fishing: We have added a new strategy to the Sustainable Non-commercial Fishing Action Plan, SNF Strategy 5: *Solicit input through forums and workshops to include indigenous experts and local fishing groups on traditional fishing methods in the region.*

Communications Cables: A section on submarine telecommunications cables was added to the International Collaboration Action Plan and a new activity was added, IC Activity 1.3. *Improve coordination of environmental reviews in relation to submarine cable licenses and Right of Ways through the Monument across the Federal Government and, as appropriate, engage with the local community to provide comment opportunities.*



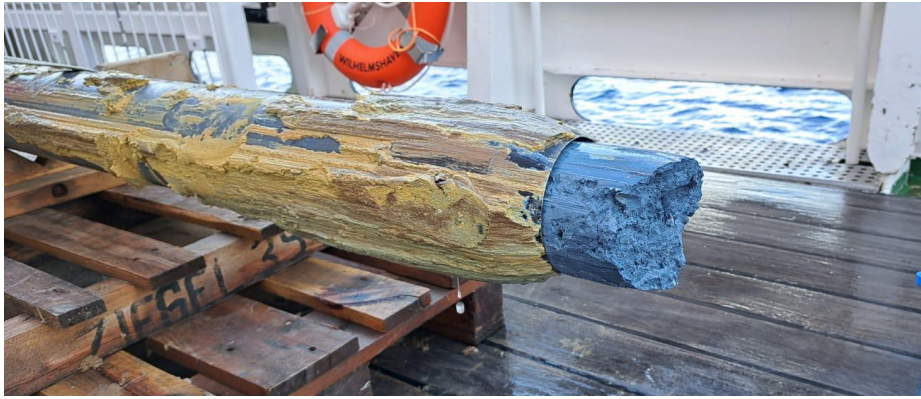
L to R: Frank Rabauliman, Richard Salas, Mark Cruz, Floyd Masga, & Maile Norman. FWS

Monument Advisory Council Reconvenes

Presidential Proclamation 8335 required the establishment of an intergovernmental committee to provide advice on the development of the MMP and management activities. At a minimum, the Council is to include three officials of the CNMI government and one representative each from the Department of Defense and the U.S. Coast Guard. The Mariana Trench Monument Advisory Council (MTMAC) is now in its third term.

The MTMAC voted Mr. Floyd Masga (CNMI-DLNR) as its chairman, Mr. Richard Salas (CNMI-BECQ) as vice chairman, and Mr. Mark Cruz (DOD) as the secretary. The other council members include Ms. Maile Norman (USCG) and Mr. Frank Rabauliman (CNMI).

MTMAC meeting minutes are posted at <https://www.fws.gov/national-monument/mariana-trench-marine>.



Blue serpentine mud oozing out of a core catcher. Walter Menapace

Naming Serpentine Mud Volcanoes

Mud volcanoes are formed when movement of tectonic plates brings mantle rocks into contact with seawater. Chemical reactions between the fluids from the Pacific Ocean plate and minerals in the mantle rock produce a new type of rock called serpentine.

The serpentine minerals, as they first form from peridotite deep beneath the seafloor, are blue! Over time, the oozing serpentine builds and creates a mud volcano. The mud volcanoes of the Mariana Forearc can grow to be the largest on the planet and can measure 18 miles or more in diameter and over a mile high.

The *RV Sonne* was permitted to conduct research on a suspected mud volcano in the Mariana Trench NWR during the summer of 2022. During that expedition, researchers discovered 2 new mud volcanoes just outside refuge boundaries. The 3 unnamed deep-sea features provided a perfect opportunity to develop Deep-Sea Feature Naming Guidelines for the Monument.

Monument managers worked with cultural advisors to draft governing principles for naming. A mud volcano naming competition was held in tandem with an educational program to foster maritime connections with the local community. A group of cultural advisors was formed to review and rank the competition. The winning names were officially recognized by the U.S. Board on Geographic Names in October, 2023.

Layúliyár Araw Hill is east of Agrigan at 19° 40' 16.20" N, 146° 44' 11.40" E. Submitted by Marilois Fernandez, the Refaluwasch meaning is "waterspout blue."

Subetbia Seamount is also east of Agrigan at 19° 52' 16.20" N, 146° 43' 36.60" E. Submitted by Vianika Reyes, Subetbia means "courageous" in Chamorro.

Haga' I Tasi Seamount is southeast of Tinian at 14° 35' 06.00" N, 147° 00' 30.60" E. Kayli Salas and Shelina Beltran submitted the Chamorro name meaning "blood of the ocean."

What Happens Next?

Action Plan activities will be prioritized annually by the Monument Management Coordination Team comprised of USFWS, NOAA, and CNMI Monument managers. The NOAA Pacific Islands Fisheries Science Center will continue to conduct Reef Assessment and Monitoring and cetacean and sea turtle assessments. Managers will support efforts to design and fabricate exhibits, grow visitor contact stations, and expand public education.

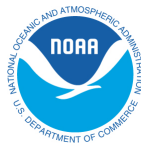
Priorities for the first year include:

- Develop an MOU for the joint permitting process.
- Develop a process to select a culturally appropriate name for the Islands Unit.
- Develop the step-down Visitor Services plan.
- Research new technologies for monitoring and enforcement.
- Study, explore, and conserve Monument features and resources.



Giant clams at Maug caldera are colorful filter feeders on the reef. NOAA

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American Memorial Park ~ 924 Micro Beach Road
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Head down into the Mariana Trench to discover an amazing fish living miles beneath the surface. Deep sea scientist Alan Jamieson and Ranger Jihan Younis are guests on **Fish of the Week!** podcast episode 25: Meet the Mariana Snailfish: trench fish extraordinaire!

www.fws.gov/fish-of-the-week-podcast

Additional information is available on our websites:
www.fws.gov/national-monument/mariana-trench-marine
www.fpir.noaa.gov/MNM/mnm_index.html



Mariana Snailfish feeding on bait over 4 miles deep in the Mariana Trench. Caladan Oceanic.