

Report on Deep Sea Mining Concerns in American Samoa

Deep sea mining (DSM) is an emerging issue in American Samoa that has generated significant discussion among government agencies, community members, and industry representatives. While the industry promotes DSM as an opportunity to diversify the economy and strengthen national security through access to critical minerals, most of the feedback collected from local meetings reflects caution and skepticism. Concerns are centered on environmental impacts, cultural values, and the potential disruption of the territory's fisheries, which remain the foundation of the economy and food security.

Regional Ecosystem Advisory Committee Discussions

At the June 2025 REAC meeting, the Bureau of Ocean Energy Management (BOEM) provided an overview of the federal review process for offshore mineral leasing following a Request for Information submitted by Impossible Metals earlier in the year. BOEM explained that the process requires environmental and cultural reviews, public comment, and close coordination with federal and territorial agencies. Committee members stressed that meaningful engagement requires translations in Samoan, acceptance of comments in both English and Samoan, and printed materials distributed in advance of meetings.

Concerns were also raised about possible overlap between DSM activity and tuna fisheries, which are the territory's primary economic driver. Members emphasized that American Samoa's longline fleet operates entirely within the U.S. EEZ, making it vulnerable to changes in fish distribution or ecosystem disruption near the islands. Questions were raised about international developments, particularly the Cook Islands' agreements with China, and whether DSM activity near EEZ boundaries could have spillover effects in American Samoa's waters. Members recommended continued monitoring of DSM initiatives and urged that any future industry involvement includes education and training opportunities to build a local workforce.

Council Family Meeting Observations

At the Council Family Meeting later in June, advisors raised fundamental questions about who benefits from DSM and whether the territory would receive a fair share of revenue. Participants referenced previous projects, such as renewable energy proposals, where benefits to American Samoa were limited or absent. They noted that without legal safeguards, promises of revenue-sharing may not materialize.

Concerns were also directed at the permanence of seabed disturbance. Members noted that resources removed from the ocean floor are unlikely to recover, and the impacts on marine ecosystems remain uncertain. Additional worries included the effect of mining discharges on fisheries, especially cultural fishing near Rose Atoll, and the lack of clarity on who would be responsible for cleaning up equipment when operations end. The meeting underscored the need

for accurate, accessible information rather than speculation, with emphasis on preparing communities to participate meaningfully in future discussions.

June Town Hall Meeting

The first town hall on deep sea mining was convened in June 2025, organized by the American Samoa Government (ASG) Deep Sea Mining Task Force. The Bureau of Ocean Energy Management (BOEM) provided a presentation on its role in reviewing offshore mineral leasing requests, noting that an unsolicited proposal had been submitted by Impossible Metals. BOEM committed to biweekly updates with ASG and emphasized transparency and collaboration throughout the process.

The Governor's Resilience Office, through Dr. Sabrina Mahuka, presented on behalf of the ASG Task Force. The presentation outlined the potential implications of DSM for American Samoa's environment, food security, cultural heritage, and economy. It noted that no comprehensive environmental studies have been conducted for the waters surrounding the territory and emphasized that the proposed mining area lies near the Manu'a Islands, which are ecologically and culturally significant.

The Resilience Office stressed that DSM could create sediment plumes affecting tuna migration routes, whales, dolphins, turtles, and coral reefs, while also disrupting cultural practices such as palolo and akule fishing. It further explained that global demand for seabed minerals is uncertain, as markets are shifting toward alternatives that reduce dependence on cobalt and nickel. Economic concerns included the lack of a guaranteed revenue share for American Samoa under federal law, the possibility that most technical jobs would go to overseas contractors, and the risk that fisheries could be compromised—the very industry that sustains thousands of local jobs.

Community members who spoke at the town hall raised several concerns. Many questioned whether American Samoa had any authority in the leasing process and expressed frustration over the limited decision-making power of the territory under federal law. Speakers emphasized that fisheries and cultural traditions are the lifeblood of the community and warned against repeating the mistakes of other nations such as Papua New Guinea and Nauru, where mining projects caused long-term environmental and economic harm. Residents stressed that even if DSM produced limited short-term benefits, it could cause irreversible damage to ecosystems and cultural heritage. Some questioned the U.S. government's fast-tracking of the lease process and asked whether local opposition could stop or delay the proposal. Others underscored the importance of educating the younger generation and ensuring their voices are heard, noting that the impacts of DSM would most directly affect their future.

Advisory Group and Council Family Discussions

At the June REAC meeting, BOEM again presented on the leasing process. Members emphasized the need for translations, acceptance of Samoan-language comments, and printed information for community use. Concerns were raised about potential impacts to tuna fisheries,

which are the territory's primary economic driver, and about possible spillover from DSM activities in neighboring waters, particularly agreements between the Cook Islands and China. REAC recommended continued monitoring of DSM, the provision of information on potential impacts to fisheries, and the inclusion of educational opportunities for local students and workers.

At the Council Family Meeting, participants questioned who would truly benefit from DSM and whether American Samoa would see equitable returns. Members recalled past experiences where industries made promises that were not realized locally. Concerns were also expressed about whether seabed resources would ever recover if disturbed, and about the risk of cultural fishing grounds near Rose Atoll being impacted. The meeting concluded that accurate information, translation services, and community preparation are essential before decisions are made.

August Town Hall Meeting

The second public town hall on deep sea mining was held in August 2025 at the Lee Auditorium. The meeting was hosted by the Department of Marine and Wildlife Resources' Resilience Office in partnership with the Deep-Sea Mining Task Force. The session provided the public with presentations from Impossible Metals, followed by commentary from invited experts and open discussion with residents.

Impossible Metals Presentation

Oliver Gunasekara, representing Impossible Metals, described deep sea mining as comparable to the development of offshore oil in the 1960s, framing it as an opportunity for investment and infrastructure upgrades in American Samoa. He highlighted the national security dimension, noting U.S. dependence on China for critical minerals such as cobalt, nickel, manganese, and copper. The company projected that the global market for these resources could reach \$1 trillion by 2035.

Gunasekara explained that Impossible Metals is offering a voluntary 1% profit share from mining revenues in American Samoa's waters, which he estimated could yield approximately \$10 million annually. He compared this proposal to Norway's transition from a fishing economy to oil wealth. He also described the company's robotic technology, which is designed to hover above the seabed, avoid marine life through AI-assisted vision, and selectively harvest nodules while leaving portions behind to maintain habitat. He stated that operations would not begin unless environmental assessments confirmed no long-term harm.

Expert Commentary

The town hall also featured remarks from Victor Vescovo, a deep-sea explorer and venture capitalist with direct experience operating submersibles at depth. He provided cautionary perspectives, citing the failure of the Nautilus Minerals project in Papua New Guinea, which left significant financial losses and environmental damage. Vescovo argued that only nickel and cobalt nodules have significant market value, both of which are subject to declining prices as

new battery technologies shift toward alternatives such as iron phosphate and sodium-based chemistries.

He further pointed out that Impossible Metals' financial models rely on inflated average prices from the past five years, while current prices suggest razor-thin margins after accounting for operating costs. Vescovo also criticized the untested nature of robotic systems at full depth, warning of inevitable mechanical failures in the harsh deep-sea environment. He concluded that if DSM projects fail, American Samoa would bear the environmental consequences while receiving no benefits.

Community Concerns

Residents and local leaders raised a range of issues during the open discussion:

- **Profit sharing and guarantees:** Many questioned why the 1% profit share was voluntary and not legally binding. Others argued that the share was too low relative to the potential value of the territory's ocean resources.
- **Testing and science:** Participants criticized the lack of real-world testing in American Samoa's waters and demanded independent scientific studies before any exploration or extraction is allowed.
- **Environmental protection:** Concerns centered on sediment plumes, disruption of fisheries, and risks to cultural fishing near Rose Atoll. Residents emphasized that food security and cultural identity depend on a healthy marine ecosystem.
- **Economic feasibility:** Community members were skeptical of promises of jobs and revenue, pointing out that DSM is highly automated and that most technical work would likely go to outside contractors. Comparisons were made to past failed projects in the Pacific that left local communities with losses.
- **Youth and future generations:** Several speakers highlighted the responsibility to protect resources for young people, noting that immediate financial gains cannot outweigh long-term cultural and ecological costs.

Summary

Across multiple meetings and public forums in 2025—including the June and August Town Halls, the Council Family Meeting, and the American Samoa Regional Ecosystem Advisory Committee—deep sea mining has emerged as one of the most pressing and controversial issues facing the territory. The discussions reflect both the early stage of the federal review process and the high level of concern within the community.

Common themes have been repeated in every setting:

- **Environmental and ecological risks** remain the foremost concern. Residents, experts, and advisory members emphasized the potential for sediment plumes, habitat destruction,

and biodiversity loss that could affect tuna fisheries, coral reefs, marine mammals, and migratory species. These impacts are seen as potentially irreversible and particularly dangerous given that fisheries are the foundation of the local economy and food security.

- **Cultural impacts** were strongly emphasized. Deep sea mining is viewed not only as an environmental issue but as a threat to Samoan identity, traditions, and practices such as palolo and akule fishing that connect people to the ocean. Many speakers described the ocean as central to life and culture, not simply as a resource to exploit.
- **Economic skepticism** dominated public feedback. Questions were raised about the adequacy of a voluntary 1% profit share, the lack of guaranteed territorial revenue under current federal law, and the likelihood that DSM jobs would go to outside specialists rather than local workers. Comparisons to failed mining projects in other Pacific nations reinforced public doubt about promised benefits.
- **Governance and authority** were recurring points of frustration. Community members asked whether American Samoa has any real say in decisions affecting its Exclusive Economic Zone, given that leasing authority rests with the federal government. Calls were made for stronger territorial involvement, legal safeguards, and clear agreements to protect local interests.
- **Community engagement and transparency** remain critical. Residents stressed the importance of translations, educational outreach, and youth involvement to ensure meaningful participation. The demand for independent, locally based scientific studies was repeated across all meetings, as was the need for transparency at each step of the federal review.

Overall, the sentiment expressed throughout 2025 has been cautious and skeptical toward deep sea mining. While proponents highlight possible benefits such as infrastructure improvements and national security, the prevailing view within American Samoa is that the risks—to fisheries, culture, food security, and the environment—far outweigh speculative promises. Until clear legal protections, binding agreements, and localized scientific assessments are in place, the community has urged that American Samoa proceed with extreme caution.