

Permit Applications and Consultation Requests – Deep Seabed Hard Minerals Mining

This Informational Report includes consultation requests to the Pacific Fishery Management Council from the National Ocean Service (NOS) and comment letters from the National Marine Fisheries Service to NOS on three applications submitted pursuant to the Deep Seabed Hard Minerals Resource Act (DSHMRA). The Council was briefed on this issue at its June 2026 meeting under [Agenda Item D.1.](#)

- **Exploration License:** Authorizes a U.S. company to conduct surveys, research, and test mining of polymetallic nodules in specified areas beyond national jurisdiction.
- **Commercial Recovery Permit:** Authorizes an eligible U.S. company to conduct recovery of polymetallic nodules in specified areas beyond national jurisdiction for marketing or commercial purposes.

Company	NOS Request for Consultation w/PFMC	Notes
American Metal Resources exploration application	7/30/26 Deadline: 11/27/26	
SeaX Inc. exploration application	7/30/26 Deadline: 11/27/26	
The Metals Company exploration application	7/30/26 Deadline: 11/27/26	
The Metals Company consolidated application	No	Public hearing 10/13; public comment period closes 10/19
American Deep Sea Minerals Inc. exploration application	No	

The Metals Company consultation letter - page 2
NMFS comments - page 4

American Metal Resources and SeaX consultation letters - pages 13 & 15
NMFS comments - page 17



UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary of Commerce
for Oceans and Atmosphere
Washington, D.C. 20230

July 30, 2026

Merrick Burden
Executive Director
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220

Dear Mr. Burden:

On December 23, 2025, the National Oceanic and Atmospheric Administration (NOAA) published a Notice of Receipt in the *Federal Register* regarding an application (Application B) filed by The Metals Company USA, LLC (TMC USA) for a license to conduct deep seabed mining exploration activities in areas beyond national jurisdiction (90 FR 60064).¹ This application was filed pursuant to the Deep Seabed Hard Mineral Resources Act (DSHMRA). Specifically, these activities would occur in an area beyond national jurisdiction known as the Clarion-Clipperton Zone. NOAA has certified this application as to the eligibility of the applicant to receive such a license on May 26, 2026, but has not yet made a decision regarding issuance of the license.

The NOAA National Marine Fisheries Service (NMFS) has advised NOAA's Office of Coastal Management (OCM) that the following fisheries are present in the proposed application area:

- Eastern Pacific Ocean Tuna Purse Seine;
- Hawaii Deep-set Longline; and
- High Seas Western and Central Pacific Ocean Tuna Purse Seine.

Based on the information currently available, NOAA is not aware of any specific impacts to these fisheries at this time. However, as at least one of these fisheries may be of interest to the Pacific Fishery Management Council (Council), NOAA is engaging in consultation with the Council regarding potential adverse impacts to fisheries that might result from the application's proposed activities under DSHMRA (see 30 U.S.C. § 1415(d);² see also 15 CFR § 970.502).

Please provide any comments or recommendations from the Council not addressed in NMFS' attached letter to OCM regarding activities described in this application that could

¹ Concurrent with Application B, TMC USA also submitted a second application for an exploration license, termed Application A. However, TMC USA has since submitted an amended consolidated Application A, which superseded the previously submitted Application A for an exploration license.

² "Prior to making a determination to issue, transfer, modify, or renew a license or permit under this section, the Administrator shall consult with any affected Regional Fishery Management Council established pursuant to section 1852 of title 16, if the activities undertaken pursuant to such license or permit could adversely affect any fishery within the Fishery Conservation Zone, or any anadromous species or Continental Shelf fishery resource subject to the exclusive management authority of the United States beyond such zone."

THE ADMINISTRATOR



adversely affect fishery(ies) of relevance to the Council. Comments are requested no later than 120 days following the date of this letter. A copy of NMFS' letter to OCM regarding TMC USA's license application is attached for your reference,³ and a copy of the nonconfidential application materials can be found at:
www.regulations.gov/document/NOAA-NOS-2025-1330-0002.⁴

NOAA would appreciate any additional information from the Council that may assist the agency's review of the application, including if appropriate, as it prepares an Environmental Impact Statement (EIS) for the potential issuance of the license and accompanying Terms, Conditions, and Restrictions (TCR). Among other steps, DSHMRA requires the completion of a final EIS, per 30 U.S.C. § 1419(d), before NOAA may issue a license.

I understand that Dr. Bryan Cole spoke with the Council at its June 2026 meeting, and we look forward to continuing the discussion. Please note that the Council will also have opportunity to provide comments during the initiation of scoping for preparation of the EIS – and publication of the draft EIS and draft TCRs for the subject application.

Thank you in advance for the Council's time and attention to this matter. We look forward to hearing from you. Please contact Dr. Cole (bryan.cole@noaa.gov) with any questions.

Sincerely,



Neil A. Jacobs, Ph.D.
Under Secretary of Commerce
for Oceans and Atmosphere
and NOAA Administrator

³ Note that NMFS's letter refers to both TMC USA Applications A and B. However, as noted above, Application A has since been superseded. This request pertains only to Application B.

⁴ Certain information including individuals' personally identifying information as well as confidential business information has been redacted.



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Pacific Islands Regional Office
1845 Wasp Blvd., Bldg. 176
Honolulu, Hawaii 96818
(808) 725-5000 • Fax: (808) 725-5215

September 18, 2025

Kerry Kehoe, Federal Consistency Specialist
Office for Coastal Management
National Oceanic and Atmospheric Administration
1305 East-West Hwy., 10th Floor
Silver Spring, MD 20910

Re: Review and recommendations regarding Deep Seabed Hard Mineral Resources Act exploration license applications from The Metals Company USA, LLC

Dear Mr. Kehoe:

The National Oceanic and Atmospheric Administration's (NOAA) Pacific Islands Regional Office (PIRO) and West Coast Regional Office (WCRO) of the National Marine Fisheries Service (NMFS) herein provide comments in response to NOAA's Office for Coastal Management (OCM) August 14, 2025 request for review and recommendations regarding two exploration license applications from The Metals Company USA, LLC (TMC) under the Deep Seabed Hard Mineral Resources Act (DSHMRA). Specifically, OCM requested recommendations regarding the certification of the applications or issuance of exploration licenses, or denial of certification or issuance. NMFS has identified no compliance issues with the applications and therefore supports certification.

NMFS will fully support OCM's efforts to responsibly unlock offshore mineral resources under DSHMRA in response to the April 24, 2025 Executive Order, Unleashing America's Offshore Critical Minerals and Resources. NMFS provides these comments regarding protected species and their habitats, existing fisheries managed by NMFS, NMFS scientific surveys, and ongoing ocean uses in the application areas (hereafter referred to as "public trust resources"). These comments focus primarily on providing information to help OCM in the certification phase of this licensing process. In the interests of coordination and cooperation, we also provide information that will become more pertinent in future phases of the licensing and permitting processes. Our response applies to both of TMC's applications: Application USA-A and Application USA-B.

National Marine Fisheries Service Authorities

NMFS may be involved in the DSHMRA process pursuant to:

- The Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 U.S.C. § 1801 et seq.), which requires NMFS to manage the long-term biological and economic sustainability of federal marine fisheries;



- The Endangered Species Act (ESA), as amended (16 U.S.C. § 1531 et seq.), which requires Federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat;
- The Marine Mammal Protection Act (MMPA) (16 U.S.C. § 1361 et seq., 50 CFR 216), which provides prohibits the “take” of marine mammals but also provides several processes to allow NMFS to authorize such take;
- The National Environmental Policy Act (NEPA) (55 U.S.C. § 4321 et seq.), which requires Federal agencies to include in their decision-making processes consideration of environmental effects of proposed actions and alternatives.

Comments on Process

The application areas contain valuable natural and economic resources, including important fisheries and complex marine ecosystems. Baseline data in the region are extremely limited, especially in the areas of benthic habitat mapping, protected species distributions, and oceanographic characteristics. NMFS looks forward to coordinating closely with OCM to close these gaps efficiently and support risk-informed license decisions.

NMFS recommends full coordination among all cooperating agencies as OCM moves through this process. Such cooperation will most effectively allow NMFS to provide OCM with targeted information related to potential overlap between mining activities and sensitive marine resources and fishing equities, and offer recommendations for minimizing conflicts early in the process.

To avoid unnecessary delays and create predictability for applicants, NMFS recommends OCM establish a clear schedule and timeline that incorporates all necessary Federal permits and authorizations. It would be beneficial if this schedule allowed for incorporation of relevant, ongoing data collection efforts. Allowing sufficient time to analyze this information will help avoid issuing licenses or permits that carry a high risk of needing to be constrained later in the process. This will also increase efficiency in the environmental review and consultation processes and minimize the risk of project delays.

Public Trust Resources in the Application Areas

Table 1. Public trust resources expected in the application areas.

Fisheries Managed Under the Magnuson-Stevens Act		
Hawaii Deepset Longline Fishery		
High Seas Western and Central Pacific Ocean Tuna Purse Seine Fishery		
Eastern Pacific Ocean Tuna Purse Seine Fishery		
ESA-Listed Species		
Common Name	Scientific Name	ESA Listing Status
Mammals		
Blue whale	<i>Balaenoptera musculus</i>	Endangered
Fin whale	<i>Balaenoptera physalus</i>	Endangered
Sei whale	<i>Balaenoptera borealis</i>	Endangered
Sperm whale	<i>Physeter macrocephalus</i>	Endangered
Mexico humpback whale	<i>Megaptera novaeangliae</i>	Threatened
Central America humpback whale	<i>Megaptera novaeangliae</i>	Endangered
Guadalupe fur seal	<i>Arctocephalus townsendi</i>	Threatened
Sea Turtles		
Central South Pacific green turtle	<i>Chelonia mydas</i>	Endangered
Central North Pacific green turtle	<i>Chelonia mydas</i>	Threatened
Central West Pacific green turtle	<i>Chelonia mydas</i>	Endangered
East Indian-West Pacific green turtle	<i>Chelonia mydas</i>	Threatened
East Pacific green turtle	<i>Chelonia mydas</i>	Threatened
Southwest Pacific green turtle	<i>Chelonia mydas</i>	Threatened
Hawksbill turtle	<i>Eretmochelys imbricata</i>	Endangered
Leatherback turtle	<i>Dermochelys coriacea</i>	Endangered
Mexico Olive ridley turtle	<i>Lepidochelys olivacea</i>	Endangered
Olive ridley turtle	<i>Lepidochelys olivacea</i>	Threatened
North Pacific loggerhead turtle	<i>Caretta caretta</i>	Endangered
Fish		
Indo-West Pacific scalloped Hammerhead shark	<i>Sphyrna lewini</i>	Threatened
Eastern Pacific scalloped hammerhead shark	<i>Sphyrna lewini</i>	Endangered
Giant manta ray	<i>Mobula birostris</i>	Threatened
Oceanic whitetip shark	<i>Carcharhinus longimanus</i>	Threatened

MMPA Species		
Common Name	Scientific Name	MMPA Status
Whales and Dolphins		
Blue whale	<i>Balaenoptera musculus</i>	Strategic & Depleted
Fin whale	<i>Balaenoptera physalus</i>	Strategic & Depleted
Sei whale	<i>Balaenoptera borealis</i>	Strategic & Depleted
Sperm whale	<i>Physeter macrocephalus</i>	Strategic & Depleted
Humpback Whale	<i>Megaptera novaeangliae</i>	Strategic & Depleted
Minke whale	<i>Balaenoptera acutorostrata</i>	
Bryde's whale	<i>Balaenoptera edeni</i>	
Blue whale	<i>Balaenoptera musculus</i>	
Fin whale	<i>Balaenoptera physalus</i>	
Short-beaked common dolphin	<i>Delphinus delphis</i>	
Pygmy killer whale	<i>Feresa attenuata</i>	
Short-finned pilot whale	<i>Globicephala macrorhynchus</i>	
Risso's dolphin	<i>Grampus griseus</i>	
Longman's beaked whale	<i>Indopacetus pacificus</i>	
Dwarf sperm whale	<i>Kogia sima</i>	
Fraser's dolphin	<i>Lagenodelphis hosei</i>	
Blainville's beaked whale	<i>Mesoplodon densirostris</i>	
Killer whale	<i>Orcinus orca</i>	
Melon-headed whale	<i>Peponocephala electra</i>	
Sperm whale	<i>Physeter macrocephalus</i>	
False killer whale	<i>Pseudorca crassidens</i>	
Pantropical spotted dolphin	<i>Stenella attenuata</i>	
Striped dolphin	<i>Stenella coeruleoalba</i>	
Spinner dolphin	<i>Stenella longirostris</i>	
Eastern spinner dolphin	<i>Stenella longirostris orientalis</i>	
Rough-toothed dolphin	<i>Steno bredanensis</i>	
Bottlenose dolphin	<i>Tursiops truncatus</i>	
Goosebeaked whale (Cuvier's)	<i>Ziphius cavirostris</i>	
Pinnipeds		
Guadalupe Fur Seal	<i>Arctocephalus townsendi</i>	Depleted

Potential Effects on Public Trust Resources

Significant data gaps remain regarding the impacts on public trust resources of this emerging technology and industry. Given the unique characteristics of the innovative equipment used and application areas, NMFS recommends that OCM collaborate closely with our Science Centers and other NOAA offices to develop and implement robust environmental studies. The resulting information will help reduce uncertainties in future phases of the licensing and permitting process. This will thereby reduce risks to OCM, its applicants, trust resources, and the communities that depend on those resources for their livelihoods.

To help prepare OCM for all licensing and permitting phases, NMFS considers here the future exploration and mining activities and the potential effects those activities may have on public trust resources (Table 1). NMFS expects mining activities will generally include: pre-extraction surveying and assessment activities; operating mining equipment; operating mining vessels; offloading and shipping mined materials; and operation of support vessels. Depending on the details of the action, the following is a preliminary list of potential effects that NMFS, OCM, or any applicant may need to consider during the licensing and permitting process:

- Entanglement risks from mooring lines and tethered equipment
- Vessel strikes
- Noise from mapping, surveys, vessels, and operation of mining equipment
- Chemical contaminants from vessels and exploration and mining equipment
- Sediment releases from seabed disturbance and return water
- Food web changes from constituents in released sediments
- Impacts to fisheries and fishing communities
- Habitat disturbance from vessel operations, mineral extraction, and port activities
- Impediments to conducting NMFS scientific surveys and safety risks
- Cumulative impacts of deep sea mining on the environment over time

Understanding the potential effects of mining activities early in the licensing and permitting process can help identify opportunities to avoid impacts on public trust resources. For those impacts that may be unavoidable, early consideration will allow OCM to better prepare for future phases of licensing and permitting. If OCM engages in an ESA consultation with NMFS in the future, the agency would consider both the consequences of the proposed action as well as the consequences of other activities that are caused by the proposed action but that are not part of the action. Examples of these activities may be port operations or modifications in support of mining activities. NMFS looks forward to discussions through our ongoing interagency coordination as part of our shared commitment to support an informed and efficient regulatory process.

Key Recommendations to Avoid and Minimize Effects on Public Trust Resources

Habitat Mapping: OCM should gather and conduct more physical and oceanographic data relevant to known habitat of ESA, MSA, and MMPA species, in coordination with NMFS. With this information, OCM could minimize data gaps during the consultations, leading to a more efficient process.

Commercial Fisheries: NMFS is committed to supporting Executive Order 14276 Restoring American Seafood Competitiveness. NMFS will support OCM by providing relevant scientific and spatial data on fisheries and fishing activity to inform the licensing and permitting processes and environmental review. The application areas overlap with NMFS-managed commercial fishing activities (Figure 1). NMFS recommends OCM, through NMFS, engage with the Western Pacific Fishery Management Council (WPFMC) and Inter-American Tropical Tuna Commission (IATTC). These fora are valuable for receiving input from the fishing community, local resource managers, and Federal fisheries managers.

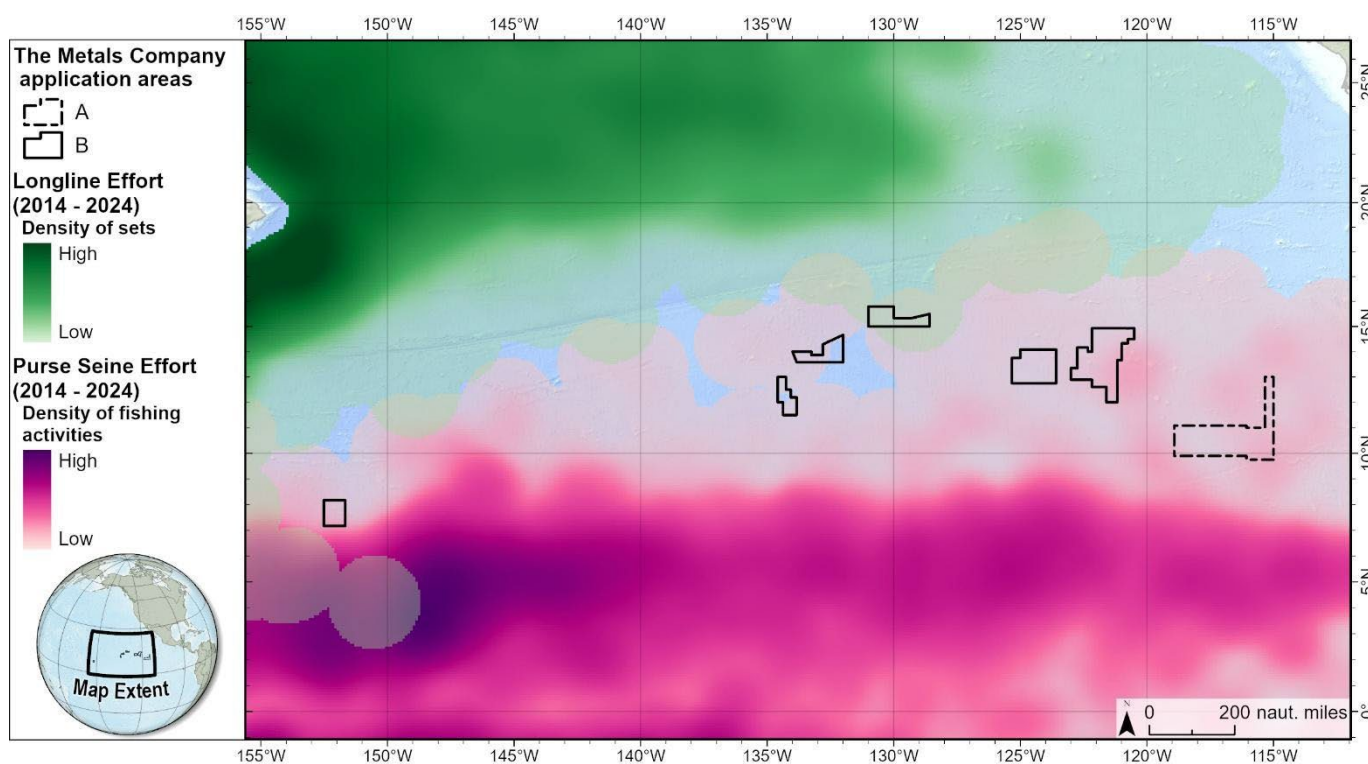


Figure 1. Fishing effort under NMFS management authorities near the application areas.

NMFS recommends that OCM work with NMFS to engage with commercial fishers to better understand how to minimize impacts to fisheries, including on coastal infrastructure supporting these fisheries. OCM would benefit from continued and enhanced engagement with NMFS, other government agencies, fishing communities, WPFMC, IATTC, and other stakeholders to ensure comprehensive consideration of fishing activity and impacts. NMFS also recommends OCM consider the cumulative regional economic, social, and cultural impacts of leasing and mining activities on Pacific fisheries, including supportive industries, shore side infrastructure, and fishing communities. A transparent process with meaningful engagement of

Pacific Islands and West Coast fishers will not only help minimize impacts on fisheries, but may improve the regulatory outcomes for OCM and applicants.

NMFS' mission-critical scientific surveys: NMFS conducts mission-critical scientific surveys to inform our fisheries and protected species management under the MSA, ESA, MMPA, and other statutory and regulatory mandates. Disruption of any surveys could decrease the amount and reliability of data available to inform our management decisions, and potentially necessitate more precautionary resource management in order to ensure adequate conservation for fisheries and protected species. NMFS' Science Centers would like to work closely with OCM to avoid and/or minimize impacts to any critical surveys.

While NMFS does not currently have mission critical surveys in the application areas, our equities and priorities shift over time, making it possible in the future. In the case of unavoidable impacts to NMFS surveys, we would like to discuss establishing and implementing a federal survey mitigation program. In December 2022, NMFS and the Bureau of Ocean Energy Management released a joint Federal Survey Mitigation Strategy¹ to address our agencies' efforts to mitigate the impacts of offshore wind development on NMFS scientific surveys. NMFS would like to work with OCM to develop a similar Federal Survey Mitigation Program for actions under DSHMRA. This will provide certainty to OCM, their applicants, NMFS, and the public who depend on the NMFS scientific survey enterprise.

Science-Based Planning and Monitoring Recommendations

Establish baseline, concurrent, & post-operational fisheries, species, and habitat monitoring requirements: The applications discuss historic baseline data collected within a portion of the USA-A area (Appendix 5 in both applications). The applications indicate the previous monitoring occurred according to NOAA's 1981 *Deep Seabed Mining: Final Technical Guidance*. Data includes physical and biological characteristics of the water column and the seafloor. The discussion includes surface visual observations for marine fauna with some details, but does not discuss monitoring fisheries, other protected species, or habitat conditions.

The applicant describes the existing environmental baseline data and additional environmental studies they will conduct to address the information requirements in NOAA's 1981 *Deep Seabed Mining: Final Technical Guidance Document*. Data collection technologies have improved and protected species have changed since that time. To establish certainty for all parties, prior to licensing and permitting it will benefit OCM to work with NMFS Science Centers to ensure monitoring strategies follow current standardized protocols, procedures, methods, and data sharing arrangements. Early collaboration with NMFS will maximize the utility of any monitoring efforts and ensure they support the regulatory process (e.g., ESA, MMPA, MSA).

Maximize value of environmental study plans: The applicant has collected baseline data for only a portion of the USA-A application area. The applications discuss completing an Environmental Scoping Study to inform a future Environmental Baseline Study (for the rest of USA-A in Section 6.1.2 and all

¹ <https://repository.library.noaa.gov/view/noaa/47925>

areas of USA-B in Section 6.1.1). NMFS is prepared to engage with OCM and/or the applicant to maximize value of these studies to future effects assessments of public trust resources.

Establish and begin collecting region-wide baseline monitoring, including passive acoustic monitoring and habitat surveys of sufficient spatial and temporal resolution: There are major gaps in the region-wide understanding of species presence, habitat conditions, fisheries use patterns, food web dynamics, and ecosystem conditions. Better understanding resource and human use conditions of areas surrounding those currently being considered for development will allow federal agencies to more effectively perform environmental assessments of future project impacts on the marine environment. This region-wide monitoring could assist in detecting geographic shifts of human use, physical and biological environmental characteristics, and protected species in response to the proposed actions. Furthermore, NMFS understands OCM has other applications for exploration in the Clarion Clipperton Zone (CCZ). Beginning a region-wide monitoring program now, would increase speed and efficiency for future licensing and permitting efforts.

No standardized baseline monitoring requirements exist that allow sufficient resolution for assessing the resource conditions region wide. Together, OCM and NMFS can build a region-wide program that will inform and provide more certainty to current and future regulatory processes.

Conclusion

NMFS thanks OCM for this interagency consultation and opportunity to provide information for use in your certification process. With this letter, NMFS provides our current knowledge of the public trust resources under NMFS jurisdiction in the proposed areas and the potential impacts of critical mineral exploration on these resources. NMFS recognizes significant data gaps and recommends continued coordination and cooperation to fill them. NMFS is committed to using the best available scientific information to avoid and minimize adverse impacts to public trust resources and reduce conflict with ocean users that rely on these areas for their livelihood.

NMFS looks forward to working with OCM and other partners as the process progresses. Through future interagency coordination, NMFS may provide additional information. If you have any questions regarding these comments, please contact PIRO's Critical Minerals Coordinator, Chuck Wheeler (chuck.wheeler@noaa.gov).

Sincerely,

A handwritten signature in black ink, appearing to read "Sarah Malloy", written in a cursive style.

Sarah Malloy
Regional Administrator

cc: Jennifer Quan, Regional Administrator, West Coast Region, NMFS
Dr. Charles Littnan, Director, NMFS PIFSC
Chuck Wheeler, Critical Minerals Coordinator, NMFS PIRO
Becky Walker, Critical Minerals Coordinator, NMFS PIFSC
Nicole Bartlett, Critical Minerals Policy Advisor, NMFS Office of Policy
Rachael Wadsworth, NMFS WCR
Fred Tucher, Chief, Pacific Islands Office of General Counsel
Emily Van Dam, NOS



July 30, 2026

Merrick Burden
Executive Director
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220

Dear Mr. Burden:

On March 23, 2026, the National Oceanic and Atmospheric Administration (NOAA) published a Notice of Receipt in the *Federal Register* regarding an application filed by American Metal Resources, Inc. (AMR) for a license to conduct deep seabed mining exploration activities in areas beyond national jurisdiction (91 FR 13822). This application was filed under the Deep Seabed Hard Mineral Resources Act (DSHMRA). Specifically, these activities would occur in an area beyond national jurisdiction known as the Clarion-Clipperton Zone. NOAA found the application to be fully compliant with the information requirements of the relevant regulations (15 CFR Part 970) on November 19, 2025, but has not yet made a decision regarding issuance of the license.

The NOAA National Marine Fisheries Service (NMFS) has advised NOAA's Office of Coastal Management (OCM) that the following fisheries are present in the proposed application area:

- Hawaii Deep-set Longline and Eastern Pacific Ocean Tuna Purse Seine

Based on the information available, NOAA is not aware of any specific impacts to these fisheries at this time. However, as at least one of these fisheries may be of interest to the Pacific Fishery Management Council (Council), NOAA is engaging in consultation with the Council regarding potential adverse impacts to fisheries that might result from the application's proposed activities under DSHMRA (see 30 U.S.C. § 1415(d);¹ see also 15 CFR § 970.502).

Please provide any comments or recommendations from the Council not addressed in NMFS' attached letter to OCM regarding activities described in this application that could adversely affect fishery(ies) of relevance to the Council. Comments are requested no later than 120 days following the date of this letter. A copy of NMFS' letter to OCM regarding AMR's license application is attached for your reference, and a copy of the non-confidential

¹ "Prior to making a determination to issue, transfer, modify, or renew a license or permit under this section, the Administrator shall consult with any affected Regional Fishery Management Council established pursuant to section 1852 of title 16, if the activities undertaken pursuant to such license or permit could adversely affect any fishery within the Fishery Conservation Zone, or any anadromous species or Continental Shelf fishery resource subject to the exclusive management authority of the United States beyond such zone."



Merrick Burden
Page 2

application materials can be found at:

www.noaa.gov/sites/default/files/2026-03/August_7_2025_AMR_Final_Formal_DSHMRA_Application_Submission_Redacted.pdf.²

NOAA would appreciate any additional information from the Council that may assist the agency's review of the application, including if appropriate, as it prepares an Environmental Impact Statement (EIS) for the potential issuance of the license and accompanying Terms, Conditions, and Restrictions (TCR). Among other steps, DSHMRA requires the completion of a final EIS, per 30 U.S.C. § 1419(d), before NOAA may issue a license.

I understand that Dr. Bryan Cole spoke with the Council at its June 2026 meeting, and we look forward to continuing the discussion. Please note that the Council will also have opportunity to provide comments during the initiation of scoping for preparation of the EIS – and publication of the draft EIS and draft TCRs for the subject application.

Thank you in advance for the Council's time and attention to this matter. We look forward to hearing from you. Please contact Dr. Cole (bryan.cole@noaa.gov) with any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Neil A. Jacobs', with a stylized flourish at the end.

Neil A. Jacobs, Ph.D.
Under Secretary of Commerce
for Oceans and Atmosphere
and NOAA Administrator

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UNITED STATES DEPARTMENT OF COMMERCE
The Under Secretary of Commerce
for Oceans and Atmosphere
Washington, D.C. 20230

July 30, 2026

Merrick Burden
Executive Director
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220

Dear Mr. Burden:

On March 23, 2026, the National Oceanic and Atmospheric Administration (NOAA) published a Notice of Receipt in the *Federal Register* regarding an application filed by SeaX, Inc. (SeaX), for a license to conduct deep seabed mining exploration activities in areas of the deep seabed beyond national jurisdiction (91 FR 13822). This application was filed under the Deep Seabed Hard Mineral Resources Act (DSHMRA). Specifically, these activities would occur in an area beyond national jurisdiction known as the Clarion-Clipperton Zone. NOAA found the application to be fully compliant with the information requirements of the relevant regulations (15 CFR Part 970) on December 9, 2025, but has not yet made a decision regarding issuance of a license.

The NOAA National Marine Fisheries Service (NMFS) has advised NOAA's Office of Coastal Management (OCM) that the following fisheries are present in the proposed application area:

- Hawaii Deep-set Longline and Eastern Pacific Ocean Tuna Purse Seine

Based on the information available, NOAA is not aware of any specific impacts to these fisheries at this time. However, as at least one of these fisheries may be of interest to the Pacific Fishery Management Council (Council), NOAA is engaging in consultation with the Council regarding potential adverse impacts to fisheries that might result from the application's proposed activities under DSHMRA (see 30 U.S.C. § 1415(d);¹ see also 15 CFR § 970.502).

Please provide any comments or recommendations from the Council not addressed in NMFS' attached letter to OCM regarding activities described in this application that could adversely affect fishery(ies) of relevance to the Council. Comments are requested no later than 120 days following the date of this letter. A copy of NMFS' letter to OCM regarding SeaX's license application is attached for your reference, and a copy of the non-confidential application materials can be found at: www.noaa.gov/sites/default/files/2026-

¹ "Prior to making a determination to issue, transfer, modify, or renew a license or permit under this section, the Administrator shall consult with any affected Regional Fishery Management Council established pursuant to section 1852 of title 16, if the activities undertaken pursuant to such license or permit could adversely affect any fishery within the Fishery Conservation Zone, or any anadromous species or Continental Shelf fishery resource subject to the exclusive management authority of the United States beyond such zone."

THE ADMINISTRATOR



Merrick Burden
Page 2

03/August 10 2025 SeaX Final Formal DSHMRA Application Submission Redacted.pdf.²²
NOAA would appreciate any additional information from the Council that may assist the agency's review of the application, including if appropriate, as it prepares an Environmental Impact Statement (EIS) for the potential issuance of the license and accompanying Terms, Conditions, and Restrictions (TCR). Among other steps, DSHMRA requires the completion of a final EIS, per 30 U.S.C. § 1419(d), before NOAA may issue a license.

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Thank you in advance for the Council's time and attention to this matter. We look forward to hearing from you. Please contact Dr. Cole (bryan.cole@noaa.gov) with any questions.

Sincerely,

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Neil A. Jacobs, Ph.D.
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UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
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West Coast Region
501 West Ocean Boulevard, Suite 4200
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January 26, 2026

Kerry Kehoe, Federal Consistency Specialist
Office for Coastal Management
National Oceanic and Atmospheric Administration
1305 East-West Hwy, 10th Floor
Silver Spring, MD 20910

Re: Review and recommendations regarding Deep Seabed Hard Mineral Resources Act exploration license applications from American Metal Resources LLC and SeaX Inc.

Dear Mr. Kehoe:

The National Oceanic and Atmospheric Administration's (NOAA) West Coast Regional Office (WCR) of the National Marine Fisheries Service (NMFS) herein provides comments in response to NOAA's Office for Coastal Management's (OCM) December 22, 2025, request for review and recommendations regarding two exploration license applications from American Metal Resources LLC and SeaX Inc. under the Deep Seabed Hard Mineral Resources Act (DSHMRA). Specifically, OCM requested recommendations regarding certification of the applications or issuance of exploration licenses, or denial of certification or issuance. NMFS does not have any concerns about the eligibility of the applications and, therefore, supports certification.

NMFS will fully support OCM's efforts to responsibly unlock offshore mineral resources under DSHMRA in response to the April 24, 2025, Executive Order, Unleashing America's Offshore Critical Minerals and Resources. NMFS provides these comments regarding protected species and their habitats, existing fisheries managed by NMFS, NMFS scientific surveys, and ongoing ocean uses in the application areas. These comments focus primarily on providing information to help OCM in the certification phase of this licensing process. In the interest of coordination and cooperation, we also provide information that will become more pertinent in future phases of the licensing and permitting processes. Our response applies to both the American Metal Resources and SeaX applications.

National Marine Fisheries Service Authorities

NMFS may be involved in the DSHMRA process pursuant to:

- The Magnuson-Stevens Fishery Conservation and Management Act (MSA) (16 U.S.C. § 1801 *et seq.*), which requires NMFS to manage the long-term biological and economic sustainability of federal marine fisheries;
- The Endangered Species Act (ESA), as amended (16 U.S.C. § 1531 *et seq.*), which requires Federal agencies to ensure that any action they authorize, fund, or carry out is not likely to



jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat;

- The Marine Mammal Protection Act (MMPA) (16 U.S.C. § 1361 *et seq.*, 50 CFR 216), which prohibits the “take” of marine mammals, but also provides several processes to allow NMFS to authorize such take; and
- The National Environmental Policy Act (NEPA) (55 U.S.C. § 4321 *et seq.*), which requires Federal agencies to include in their decision-making processes consideration of environmental effects of proposed actions and alternatives.
- The Tuna Convention Act (16 U.S.C. § 951 *et seq.*), which authorizes NMFS to promulgate regulations to implement recommendations and decisions by the Inter-American Tropical Tuna Commission (IATTC), of which the United States is a Member.

Comments on Process

The application areas contain valuable natural and economic resources, including important fisheries and complex marine ecosystems. Baseline data in the region are extremely limited, especially in the areas of benthic habitat mapping, protected species distributions, and oceanographic characteristics. NMFS looks forward to coordinating closely with OCM to address these gaps efficiently and support risk-informed licensing decisions.

NMFS recommends coordination among all cooperating agencies and relevant NOAA offices as OCM moves through this process. Such cooperation will most effectively allow NMFS to provide OCM with targeted information related to potential overlap between mining activities, sensitive marine resources, and fishing equities, and offer recommendations for minimizing conflicts early in the process.

To avoid unnecessary delays and create predictability for applicants, NMFS recommends OCM establish a clear schedule and timeline that incorporates all necessary Federal permits and authorizations. It would be beneficial if this schedule allowed for incorporation of relevant, ongoing data collection efforts. Allowing sufficient time to analyze this information will help avoid issuing licenses or permits that carry a high risk of needing to be constrained later in the process. This will also increase efficiency in the environmental review and consultation processes and minimize the risk of project delays.

Resources Subject to Certain NMFS' Statutory Authorities in Application Areas

Table 1.

Fisheries Managed Under the Magnuson-Stevens Act		
Eastern Pacific Ocean Tuna Purse Seine Fishery		
Hawaii Deepset Longline Fishery		
ESA-Listed Species		
Common Name	Scientific Name	ESA Listing Status
Mammals		
Blue whale	<i>Balaenoptera musculus</i>	Endangered
Fin whale	<i>Balaenoptera physalus</i>	Endangered
Sei whale	<i>Balaenoptera borealis</i>	Endangered
Sperm whale	<i>Physeter macrocephalus</i>	Endangered
Mexico humpback whale	<i>Megaptera novaeangliae</i>	Threatened
Central America humpback whale	<i>Megaptera novaeangliae</i>	Endangered
Guadalupe fur seal	<i>Arctocephalus townsendi</i>	Threatened
Sea Turtles		
East Pacific green turtle	<i>Chelonia mydas</i>	Threatened
Central North Pacific green turtle	<i>Chelonia mydas</i>	Threatened
Central South Pacific green turtle	<i>Chelonia mydas</i>	Endangered
Hawksbill turtle	<i>Eretmochelys imbricata</i>	Endangered
Leatherback turtle	<i>Dermochelys coriacea</i>	Endangered
Mexico Olive ridley turtle	<i>Lepidochelys olivacea</i>	Endangered
Olive ridley turtle	<i>Lepidochelys olivacea</i>	Threatened
North Pacific loggerhead turtle	<i>Caretta caretta</i>	Endangered
Fishes		
Eastern Pacific scalloped hammerhead shark	<i>Sphyrna lewini</i>	Endangered
Giant manta ray	<i>Mobula birostris</i>	Threatened
Oceanic whitetip shark	<i>Carcharhinus longimanus</i>	Threatened
MMPA Species		
Common Name	Scientific Name	MMPA Status
Cetaceans		
Blue whale	<i>Balaenoptera musculus</i>	Strategic & Depleted
Fin whale	<i>Balaenoptera physalus</i>	Strategic & Depleted
Sei whale	<i>Balaenoptera borealis</i>	Strategic & Depleted
Sperm whale	<i>Physeter macrocephalus</i>	Strategic & Depleted

Humpback Whale	<i>Megaptera novaeangliae</i>	Strategic & Depleted
Minke whale	<i>Balaenoptera acutorostrata</i>	
Bryde's whale	<i>Balaenoptera edeni</i>	
Blue whale	<i>Balaenoptera musculus</i>	
Fin whale	<i>Balaenoptera physalus</i>	
Short-beaked common dolphin	<i>Delphinus delphis</i>	
Pygmy killer whale	<i>Feresa attenuata</i>	
Short-finned pilot whale	<i>Globicephala macrorhynchus</i>	
Risso's dolphin	<i>Grampus griseus</i>	
Longman's beaked whale	<i>Indopacetus pacificus</i>	
Dwarf sperm whale	<i>Kogia sima</i>	
Fraser's dolphin	<i>Lagenodelphis hosei</i>	
Blainville's beaked whale	<i>Mesoplodon densirostris</i>	
Killer whale	<i>Orcinus orca</i>	
Melon-headed whale	<i>Peponocephala electra</i>	
Sperm whale	<i>Physeter macrocephalus</i>	
False killer whale	<i>Pseudorca crassidens</i>	
Pantropical spotted dolphin	<i>Stenella attenuata</i>	
Striped dolphin	<i>Stenella coeruleoalba</i>	
Spinner dolphin	<i>Stenella longirostris</i>	
Eastern spinner dolphin	<i>Stenella longirostris orientalis</i>	
Rough-toothed dolphin	<i>Steno bredanensis</i>	
Bottlenose dolphin	<i>Tursiops truncatus</i>	
Goosebeaked whale (Cuvier's)	<i>Ziphius cavirostris</i>	
Pinnipeds		
Guadalupe Fur Seal	<i>Arctocephalus townsendi</i>	Depleted

NMFS Capabilities and Authorities

NMFS has certain statutory authorities regarding a number of marine resources found in and around the application areas. It is important to have an understanding of any potential impacts to resources at an early stage. Given the unique characteristics of the innovative equipment used and the application areas, NMFS recommends close collaboration with OCM and other NOAA offices to develop and implement robust environmental studies. The resulting information will help reduce uncertainties in future phases of the licensing and permitting process. This will thereby reduce risks to OCM, its applicants, marine resources, and the communities that depend on those resources for their livelihoods.

To help prepare OCM for all licensing and permitting phases, NMFS considers here the future exploration and mining activities and the potential effects those activities may have on the marine resources under NMFS' statutory authority (Table 1). NMFS expects mining activities will generally include: pre-extraction surveying and assessment, operating mining equipment, operating mining vessels, offloading and shipping mined materials, and operating support vessels. The following is a preliminary list of potential effects that NMFS, OCM, or any applicant may need to consider during the licensing and permitting process (depending on the details of the action):

- Entanglement risks from mooring lines and tethered equipment
- Vessel strikes
- Noise from mapping, surveys, vessels, and operation of mining equipment
- Chemical contaminants from vessels and exploration and mining equipment
- Sediment releases from seabed disturbance and return water
- Food web changes from constituents in released sediments
- Impacts to fisheries and fishing communities
- Habitat disturbance from vessel operations, mineral extraction, and port activities
- Cumulative impacts of deep sea mining on the environment over time

Understanding the potential effects of mining activities early in the licensing and permitting process can help identify opportunities to avoid impacts on marine resources. For those impacts that may be unavoidable, early consideration will allow OCM to better prepare for future phases of licensing and permitting. If OCM engages in an ESA consultation with NMFS in the future, the agency would consider both the consequences of the proposed action as well as the consequences of other activities that are caused by, but not part of, the proposed action. Examples of these activities may be port operations or modifications in support of mining activities. NMFS looks forward to discussions through our ongoing interagency coordination as part of our shared commitment to support an informed and efficient regulatory process.

Key Recommendations to Avoid and Minimize Effects on Resources Subject to Certain NMFS' Statutory Authorities

Habitat mapping: OCM should consider gathering and conducting more physical and oceanographic data relevant to known habitat of ESA, MSA, and MMPA species, in coordination with NMFS. With this information, OCM could minimize data gaps during the consultations, leading to a more efficient process.

Commercial fisheries: NMFS is committed to supporting Executive Order 14276, Restoring American Seafood Competitiveness. NMFS will support OCM by providing relevant scientific and spatial data on fisheries and fishing activity to inform the licensing and permitting processes and environmental review. The application areas overlap with NMFS-managed commercial fishing activities (Figure 1) and non-U.S. commercial fishing activities managed by IATTC (Figures 2 and 3). NMFS recommends OCM, through NMFS, engage with the Pacific Fishery Management Council (PFMC) and the IATTC. These fora are valuable for receiving input from the fishing community, local resource managers, and Federal fisheries managers.

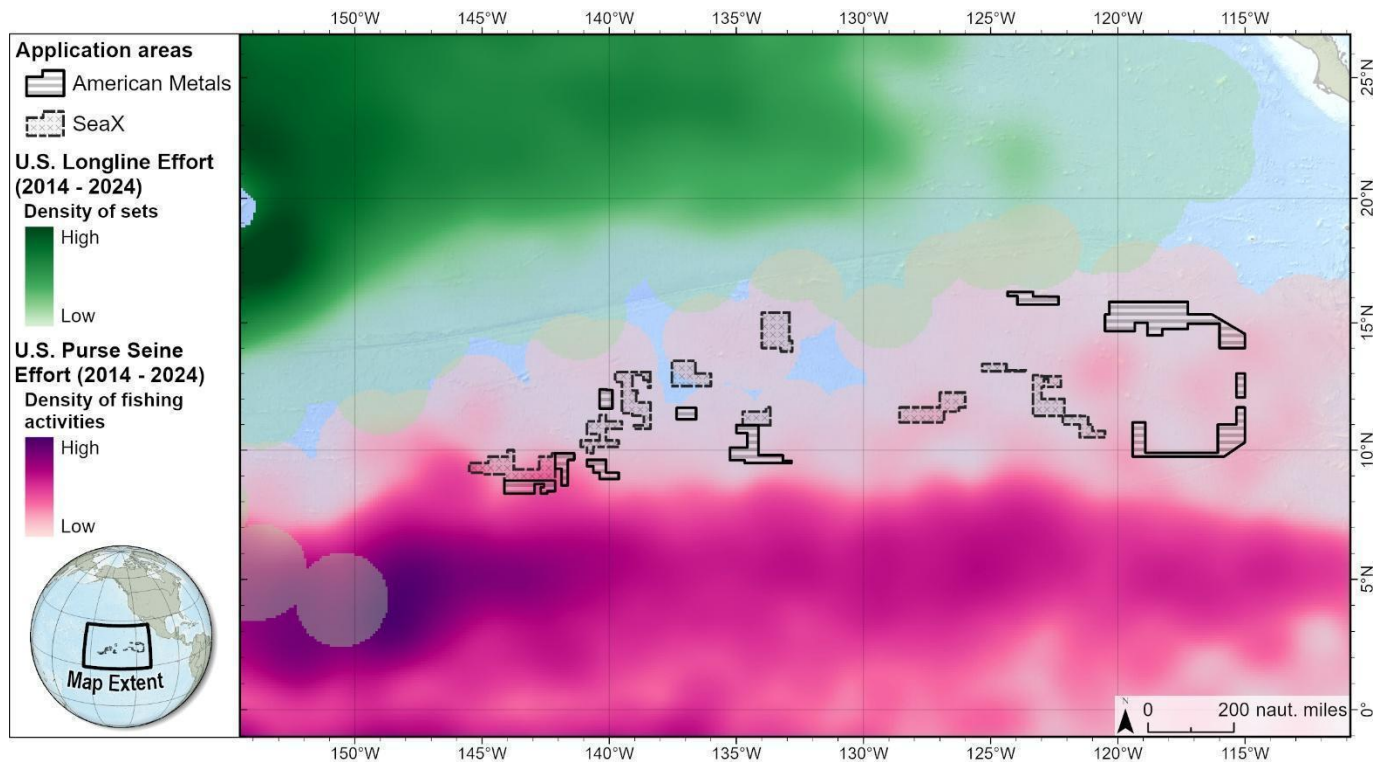


Figure 1. U.S. longline and purse seine fishing effort under NMFS management authorities, between 2014 and 2024, near the application areas.

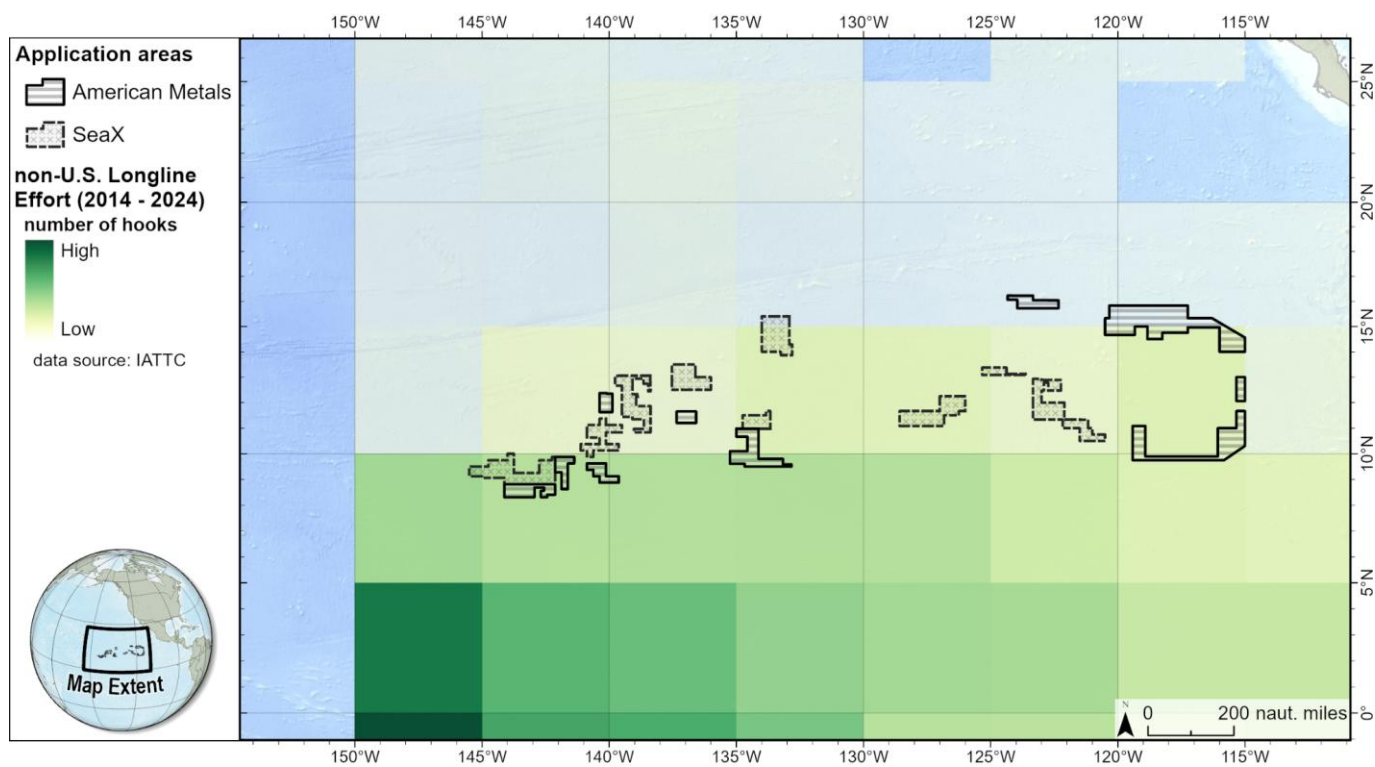


Figure 2. Non-U.S. longline fishing effort under IATTC management authority, between 2014 and 2024, near the application areas.

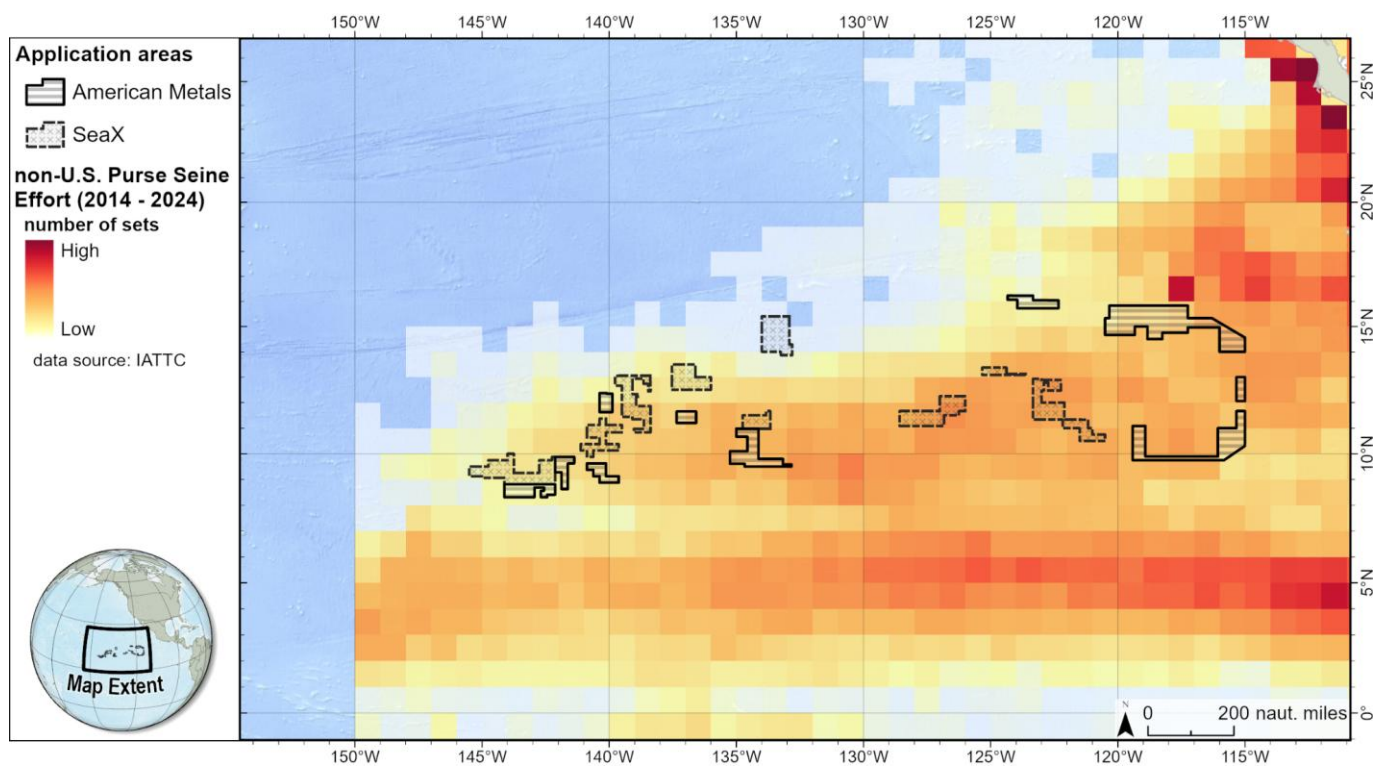


Figure 3. Non-U.S. purse seine fishing effort under IATTC management authority, between 2014 and 2024, near the application areas.

NMFS recommends that OCM work with NMFS on a process to engage with commercial fishers to better understand how to minimize impacts to fisheries, including on coastal infrastructure supporting these fisheries. OCM would benefit from continued and enhanced engagement with NMFS, other government agencies, fishing communities, PFMC, IATTC, and other stakeholders to ensure comprehensive consideration of fishing activity and impacts. NMFS also recommends OCM consider the cumulative regional economic, social, and cultural impacts of leasing and mining activities on Pacific fisheries, including supportive industries, shore side infrastructure, and fishing communities. A transparent process with meaningful engagement of Eastern Pacific Ocean, Pacific Islands, and West Coast fishers will not only help minimize impacts on fisheries, but may improve the regulatory outcomes for OCM and applicants.

NMFS’ mission-critical scientific surveys: NMFS conducts mission-critical scientific surveys to inform our fisheries and protected species management under the MSA, ESA, MMPA, and other statutory and regulatory mandates. Disruption of any surveys could decrease the amount and reliability of data available to inform our management decisions, and potentially necessitate more precautionary resource management in order to ensure adequate conservation for fisheries and protected species. NMFS’ Science Centers would like to work closely with OCM to avoid and/or minimize impacts to any critical surveys.

While NMFS does not currently have mission critical surveys in the application areas, our equities and priorities shift over time, making it possible in the future. In the case of unavoidable impacts to NMFS surveys, we would like to discuss establishing and implementing a federal survey mitigation program. In December 2022, NMFS and the Bureau of Ocean Energy Management released a joint Federal Survey Mitigation Strategy¹ to address our agencies’ efforts to mitigate the impacts of offshore wind development on NMFS scientific surveys. NMFS would like to work with OCM to develop a similar Federal Survey Mitigation Program for actions under DSHMRA. This will provide certainty to OCM, their applicants, NMFS, and the public who depend on the NMFS scientific survey enterprise.

Science-Based Planning and Monitoring Recommendations

Establish baseline, concurrent, & post-operational fisheries, species, and habitat monitoring requirements: The applications state that they are committed to carrying out the Exploration Plan in adherence with the environmental requirements contained in DSHMRA, the Regulations, the exploration license conditions, as well as other applicable rules and regulations. The applications discuss building upon extensive environmental studies and monitoring programs that have been carried out in the Clarion Clipperton Zone (CCZ) over the past 20 years under the International Seabed Authority administration. Data from these studies and programs includes physical and biological characteristics of the water column and the seafloor. The discussion includes surface visual observations for marine fauna with some details, but does not discuss monitoring fisheries, other protected species, or habitat conditions.

The applications state that where public data already exists, they will utilize past work to streamline their environmental programs based on current knowledge. Where the data do not currently exist, studies will

¹ <https://repository.library.noaa.gov/view/noaa/4792>

be designed to bridge those knowledge gaps. It should be noted that data collection technologies have improved and protected species have changed since some survey data were collected. To establish certainty for all parties, prior to licensing and permitting, it will benefit OCM to work with NMFS Science Centers and regional offices to ensure monitoring strategies follow current standardized protocols, procedures, methods, and data sharing arrangements. Early collaboration with NMFS will maximize the utility of any monitoring efforts and ensure they support regulatory processes (e.g., ESA, MMPA, MSA).

Maximize value of environmental study plans: The applications describe establishing baseline studies to characterize the environments likely to be impacted including physical oceanography, chemical oceanography, geological properties, biological communities, bioturbation and fluxes to the sediment. NMFS is prepared to engage with OCM and/or the applicant to maximize the value of these studies to future effects assessments of marine resources.

Establish and begin collecting region-wide baseline monitoring, including passive acoustic monitoring and habitat surveys of sufficient spatial and temporal resolution: There are major gaps in the region-wide understanding of species presence, habitat conditions, fisheries use patterns, food web dynamics, and ecosystem conditions. A better understanding of resource and human use conditions for areas surrounding those currently being considered for development will allow Federal agencies to more effectively perform environmental assessments of future project impacts on the marine environment. This region-wide monitoring could assist in detecting geographic shifts of physical and biological environmental characteristics, fisheries and other human uses, and protected species in response to the proposed actions. Furthermore, NMFS understands OCM has other applications for exploration in the CCZ. Beginning a region-wide monitoring program now, would increase speed and efficiency for future licensing and permitting efforts.

No standardized baseline monitoring requirements exist that allow sufficient resolution for assessing the resource conditions region wide. Together, OCM and NMFS can build a region-wide program that will inform and provide more certainty to current and future regulatory processes.

Conclusion

NMFS thanks OCM for this interagency consultation and opportunity to provide information for use in your certification process. With this letter, NMFS provides our current knowledge of the resources under NMFS jurisdiction in the proposed areas and the potential impacts of critical mineral exploration on these resources. NMFS recognizes that there are some data gaps and recommends continued coordination and cooperation to fill them, where appropriate. NMFS is committed to using the best available scientific and commercial information to avoid and minimize adverse impacts to marine resources and reduce conflict with ocean users that rely on these areas for their livelihood.

NMFS looks forward to working with OCM and other partners as the process progresses. Through future interagency coordination, NMFS may provide additional information. If you have any questions regarding these comments, please contact Nicole Nasby-Lucas (nicole.nasby-lucas@noaa.gov).

Sincerely,

A handwritten signature in blue ink, appearing to read "Jennifer Quan". The signature is fluid and cursive, with the first name "Jennifer" being more prominent than the last name "Quan".

Jennifer Quan
Regional Administrator

cc: Sarah Malloy, Regional Administrator, NMFS, PIRO
Ryan Wulff, Assistant Regional Administrator, SFD, NMFS, WCR
Chris Yates, Assistant Regional Administrator, PRD, NMFS, WCR
Rachael Wadsworth, HMS Branch Chief, NMFS, WCR
Kristen Koch, Director, NMFS, SWFSC
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Nicole Bartlett, Critical Minerals Policy Advisor, NMFS, Office of Policy
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