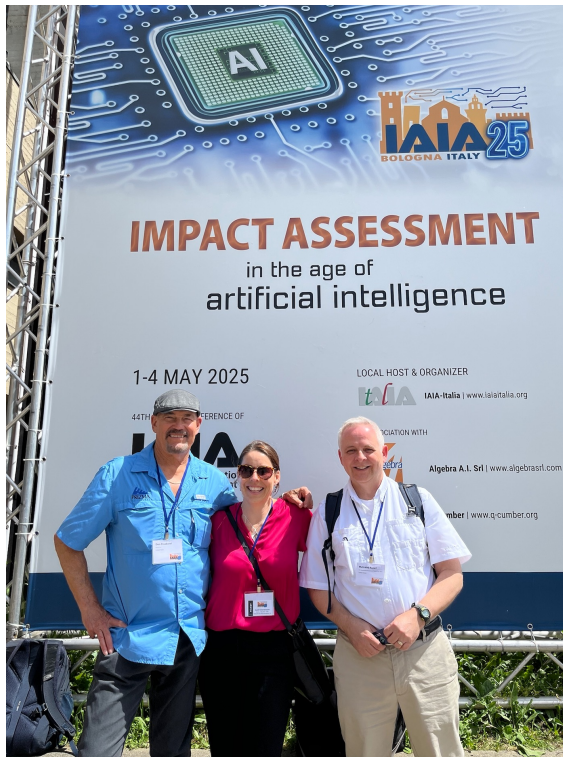


SOCIAL IMPACTS OF DEEP-SEA MINING IN THE EASTERN PACIFIC: A CASE STUDY (FOCUS ON FISHERIES)



Don S Proebstel, PhD
Sr. ESA Advisor
Hawaii USA

About Prizma

www.prizmasolutions.com



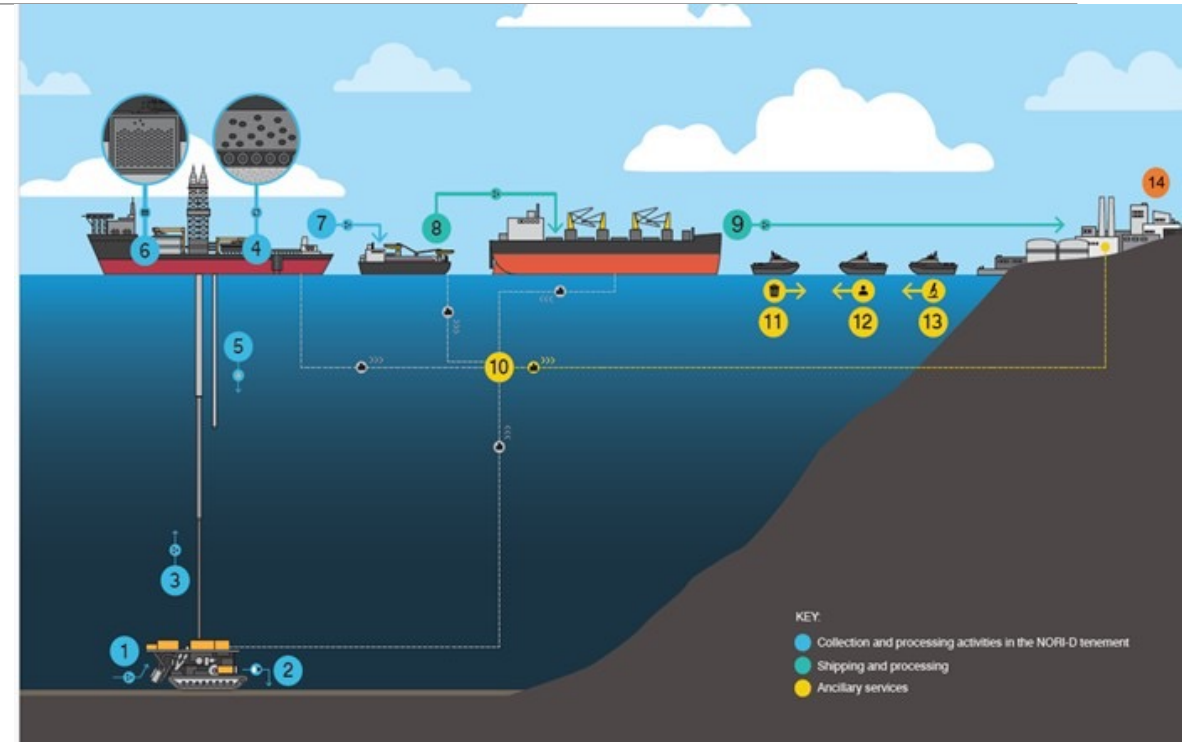
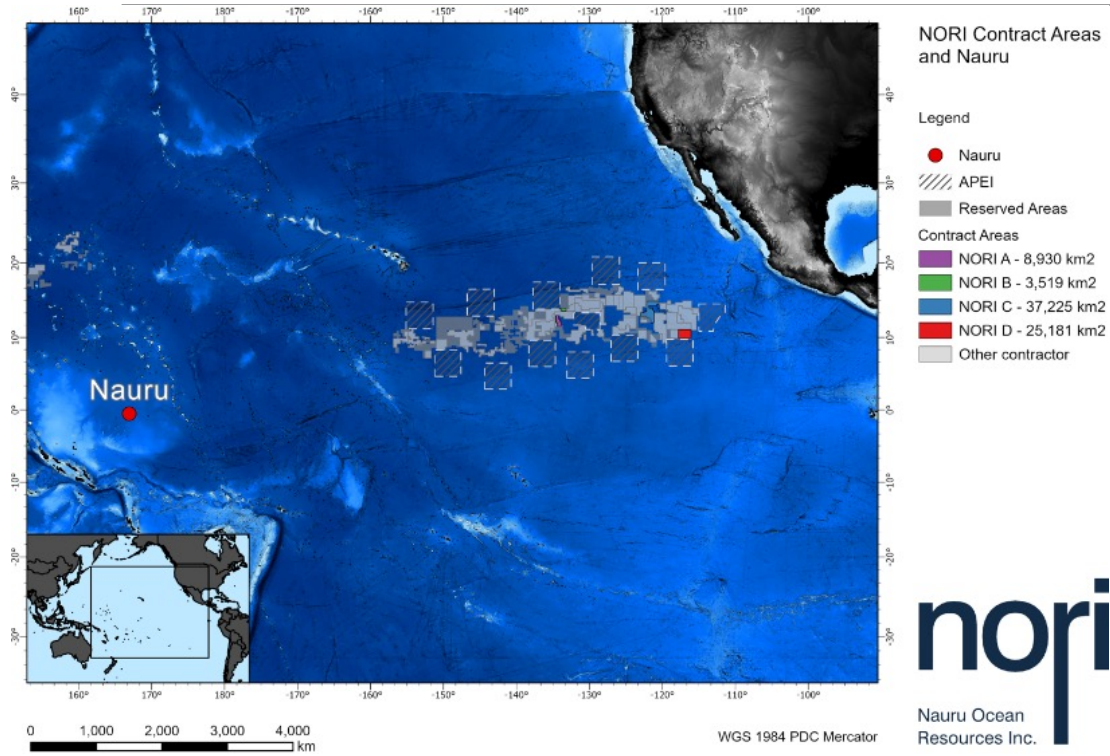
*Making Your Projects More
Bankable, Credible & Sustainable*



Prizma contributes to feasibility studies, trouble-shoots or generates bankable ESIA's, conducts due diligence and monitoring, and improves or assures ESG performance and ratings. We also assist independent accountability mechanisms, resolve company-community conflicts, and provide compelling expert witnesses for clients pursuing investor-state dispute settlements.

QP, ESIA, ESG, IESC, ESG Reporting, Arbitration, Assurance & Accountability

The Metals Company's Project: NORI-D



Clarion Clipperton Zone... size of US... 1,500 km from Mexico... 3,000 km from Hawaii- NORI D... 25,000 km²

Narratives vs. Assessment Processes

Narratives

- NGO Campaigns
- Media Amplification
- Social Media Discourse
- Advocacy Framing
- Emerging Hypotheses (dark oxygen)
- Community Concerns and Values
- Broad Generalization Messaging

Biodiversity, Fisheries, Cultural Heritage...

Assessment Processes

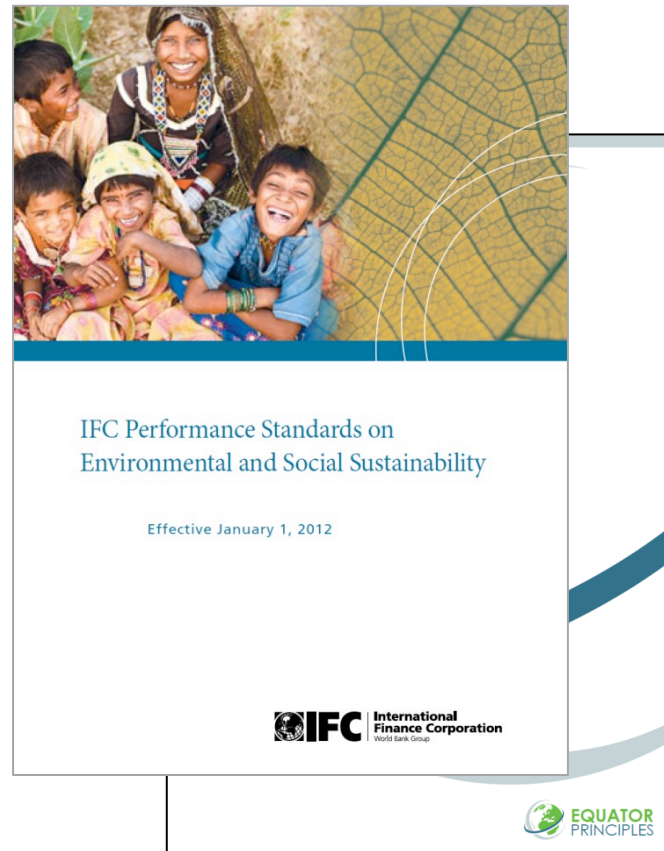
- ❖ SIA Scoping*
- ❖ Public Consultation
- ❖ Emerging ISA Regulations
- ❖ IFC Performance Standards
- ❖ IAIA Best Practice
- ❖ CSIRO Modeling
- ❖ Data from Collector Test
- ❖ Thermodynamics of Seafloor
- ❖ Peer Review Publications

*https://metals.co/wp-content/uploads/2022/12/NORI-D-SIA-Scoping-Dec_2022.pdf

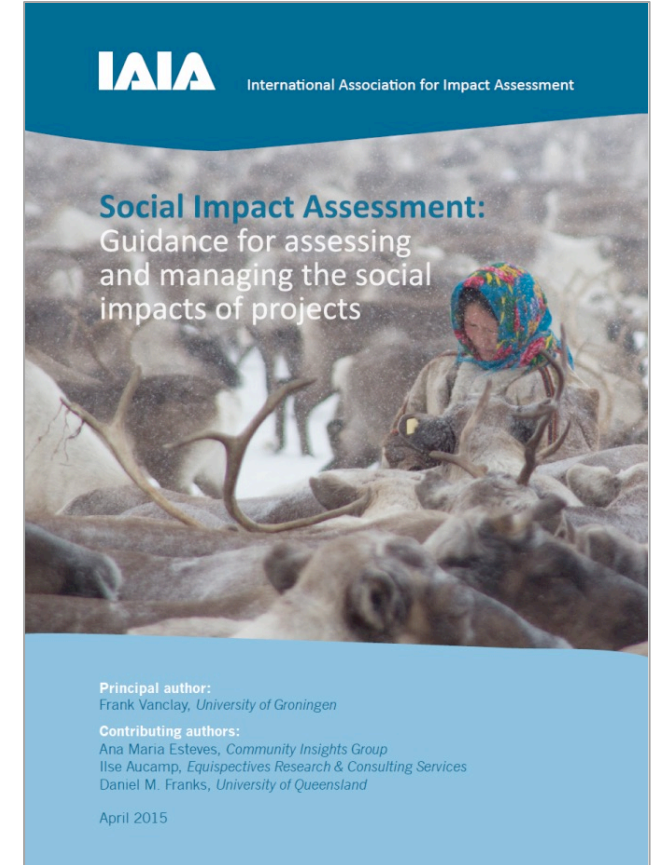
Analytical Methods Applied



Draft ISA regs

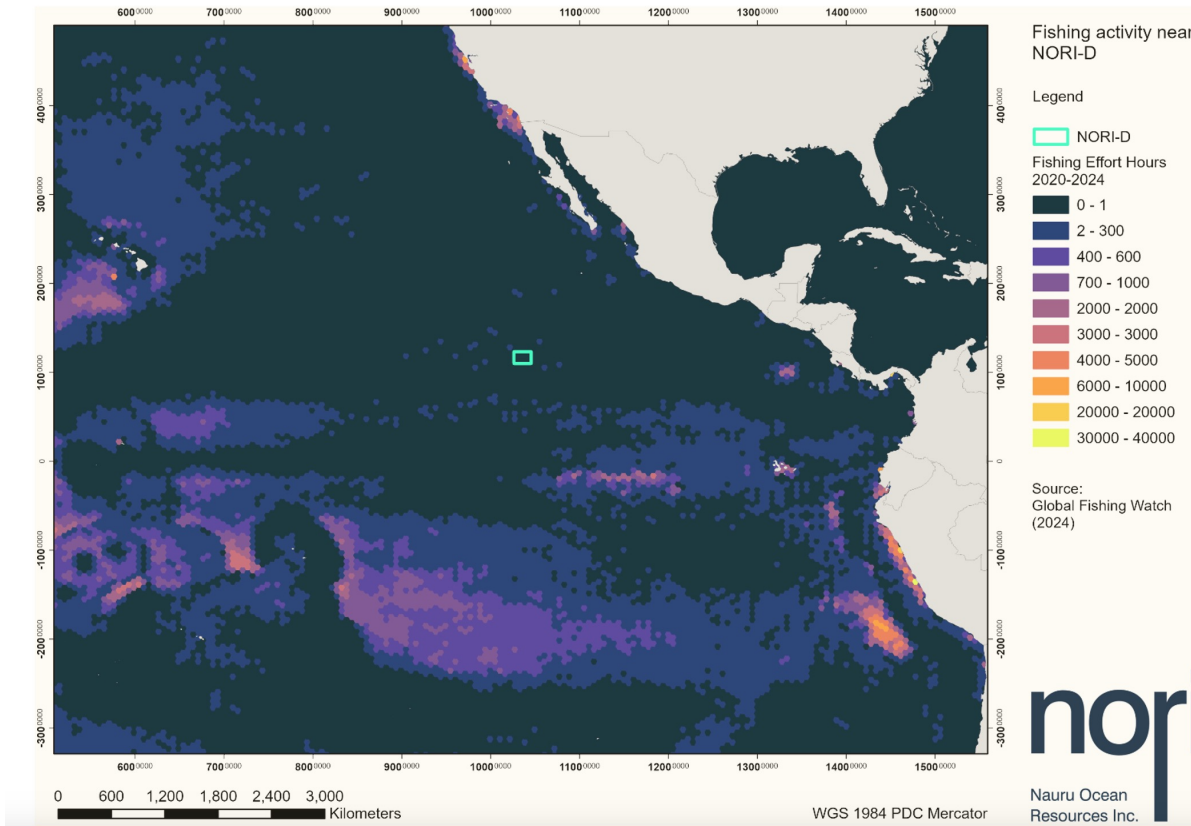


IFC PS/EPs

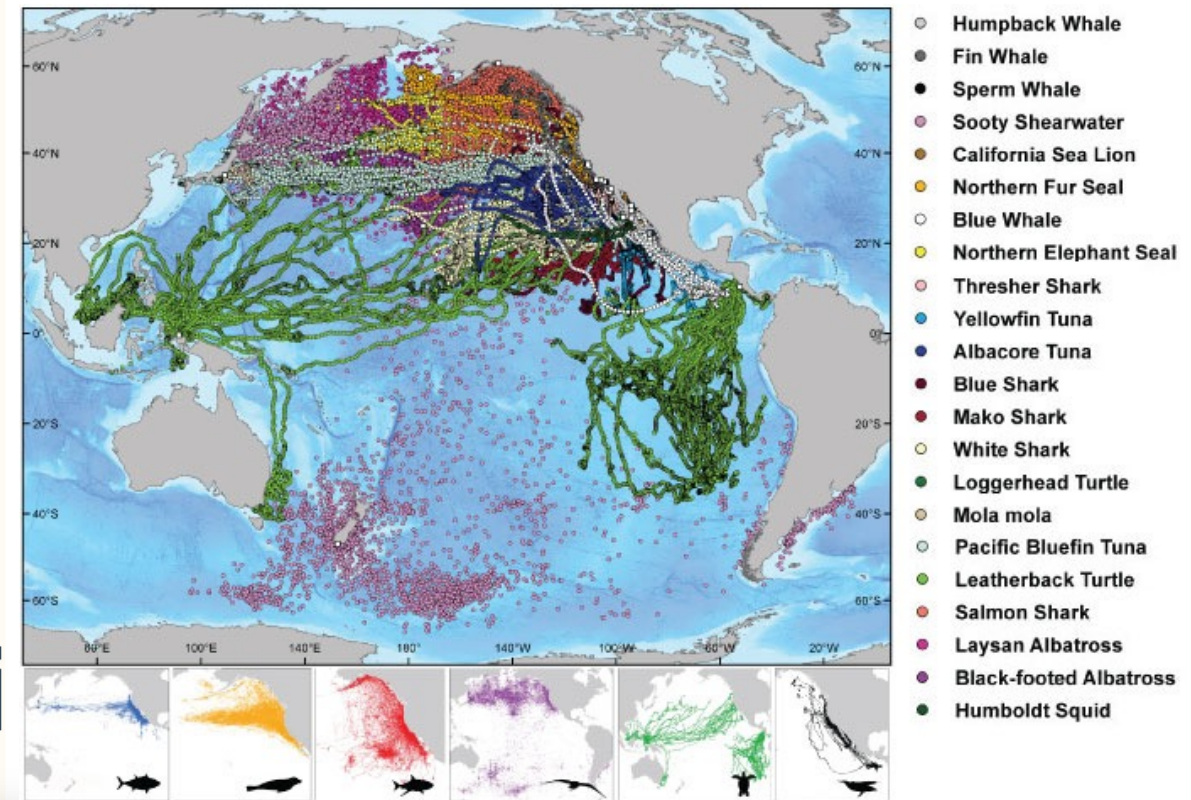


GIIP

Fisheries, Marine Species



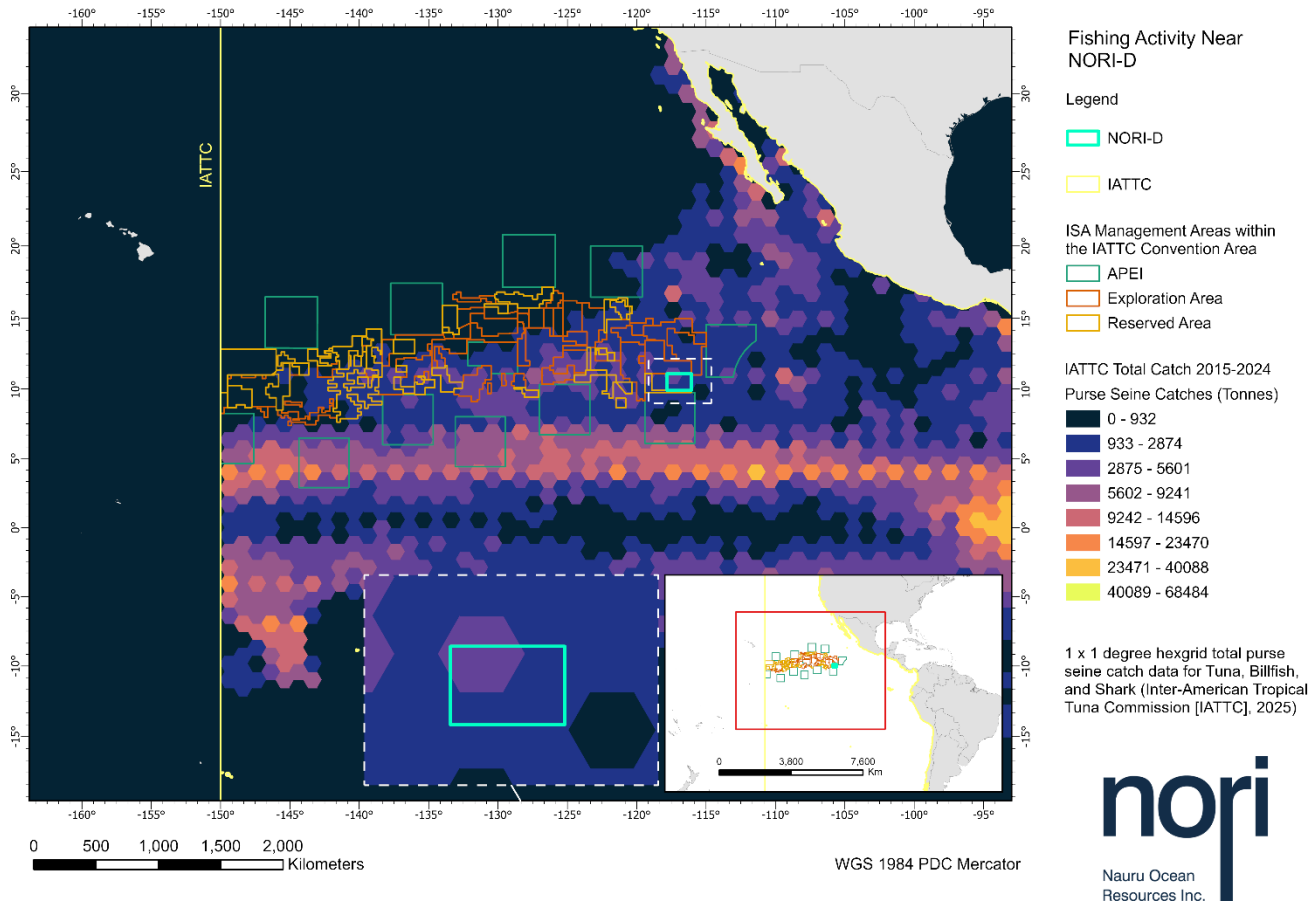
Site specific data- critical to assessing social impacts



[Distribution of all marine species in Pacific Ocean](http://tagagiant.blogspot.com/2011/06/landmark-study-published-on-pacific.html)

<http://tagagiant.blogspot.com/2011/06/landmark-study-published-on-pacific.html>

Impacts to Fisheries ?



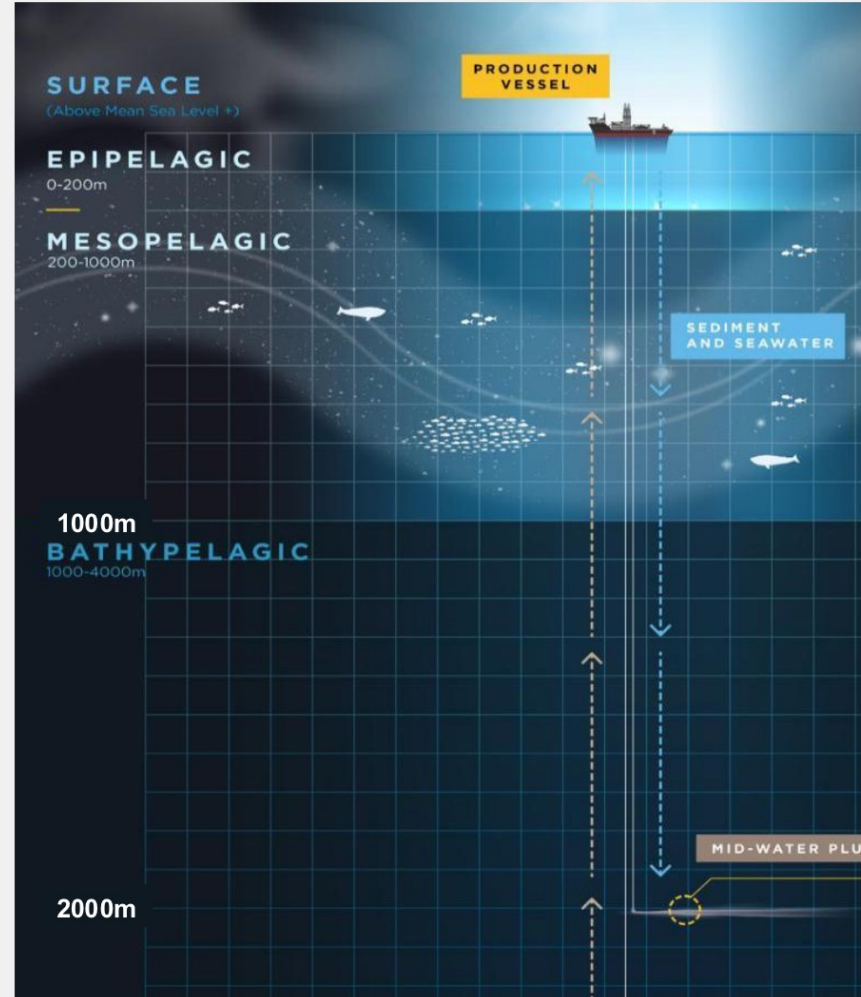
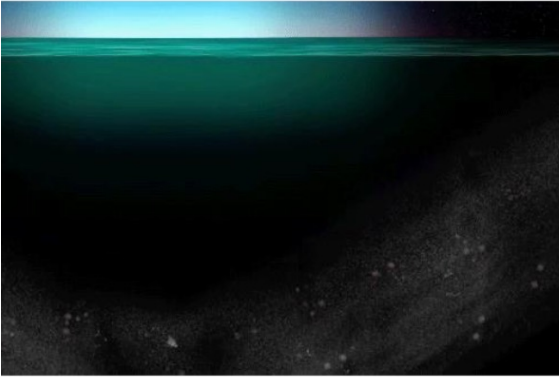
- Fishing is in upper 200 meters of the water column*
- Total catch (95-99%) is primarily from Skipjack, Yellowfin and Bigeye tuna**
- No significant fishing in NORI D (turquoise rectangle)

[*https://www.isa.org.jm/wp-content/uploads/2023/07/ISA_Technical-Study_33.pdf](https://www.isa.org.jm/wp-content/uploads/2023/07/ISA_Technical-Study_33.pdf)

** Inter-American Tropical Tuna Commission (IATTC)

Impacts to Fisheries

2000m midwater plume discharge



- Discharge at 2,000 meters (1,000 meters below mesopelagic zone- where fisheries occur)
- Midwater plume is dispersed within 2,000 meters
- < 0.5 % of commercial catch (IATTC data)
- Impact to fisheries is not material

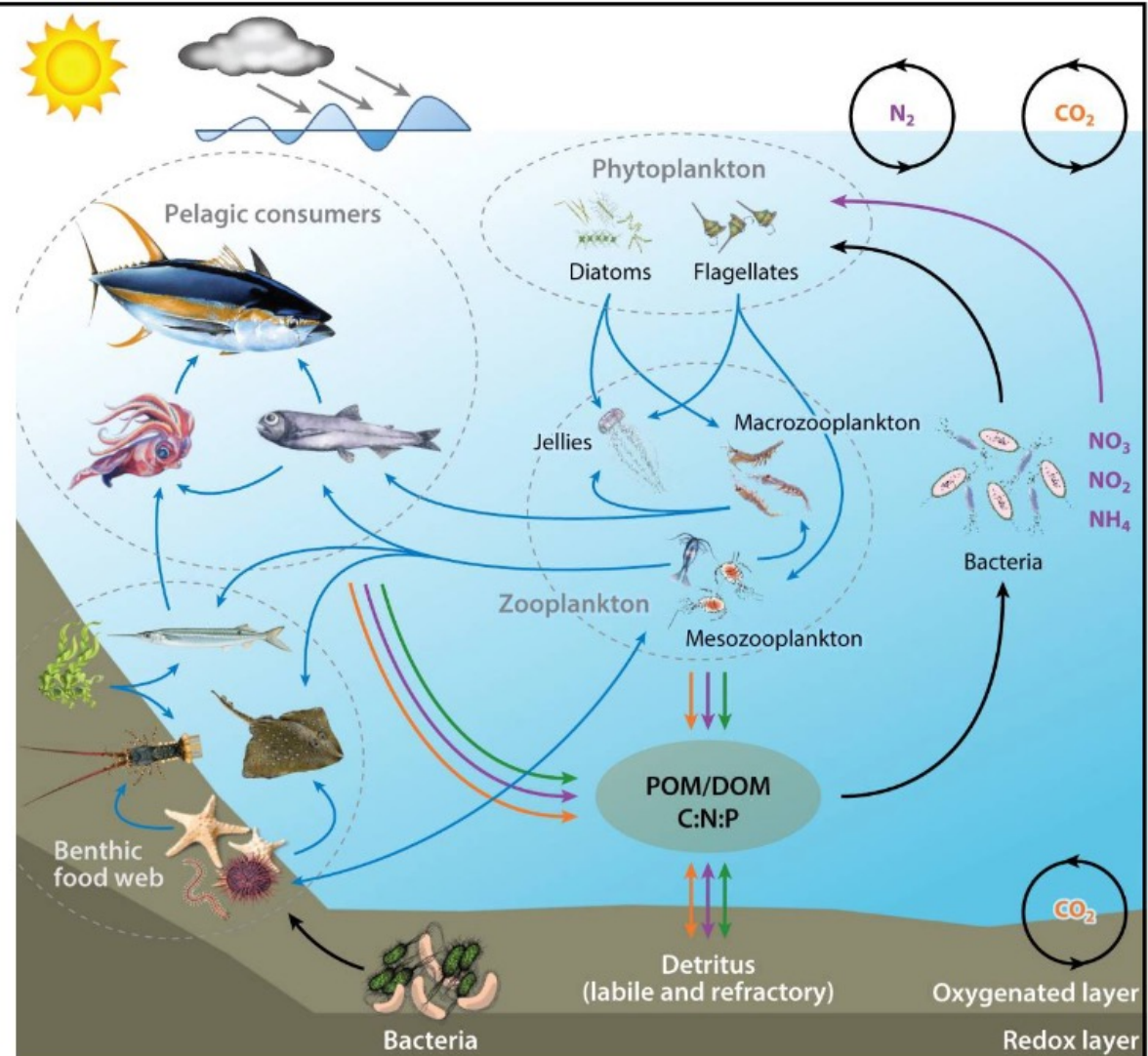
Ecosystem Services



Modelling ecological effects of discharge plumes from deep-sea mining

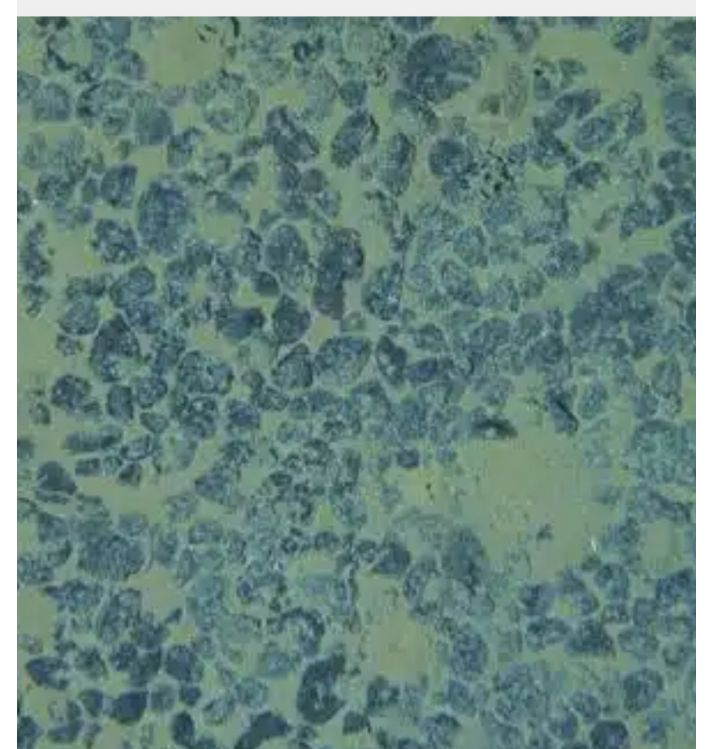
Heidi Pethybridge & Beth Fulton
22 Jan 2025

Australia's National Science Agency



Summary of Social Impacts to Fisheries

- Very limited commercial fishing
<0.5% of catch in EPO
- Return water disperses < 2,000
meters: return to background
- SI to fisheries not Material:
Project Location & Limited Fishery





Let's continue the conversation!

Message me your questions or comments in the IAIA26 app.

Don S Proebstel, PhD

SR E&S and Renewable Energy Advisor

Hawaii, USA

don@prizmasolutions.com

Prizmasolutions.com

#iaia26