



SEABED MINING IN THE TOP END

A Snapshot of Environmental Concerns

Mining the seabed for minerals is inherently risky. Shifting ocean currents, sedimentation and disposal of waste materials combine to make mineral extraction from the seabed incredibly complex. The Top End is a shallow water environment, home to some of the greatest turtle and dugong habitat on the planet. This factsheet takes a look at the risks of seabed mining to our fragile marine environment.

Australia's seabed hosts various mineral deposits including copper, tin, bauxite (aluminium), diamond and manganese. There have been several offshore mineral exploration licences granted in the Northern Territory in recent years.

There have been seabed mining proposals and preliminary exploration from a range of companies, including Northern Manganese Limited, Groote Resources Limited, and BHP Billiton's Groote Eylandt Mining Company (GEMCO), who were seeking manganese in the

shallow waters around Groote Eylandt, in the north-west Gulf of Carpentaria. Manganese is used in the manufacture of steel and is currently the predominant mineral sought by seabed mining companies. In 2012 Northern Manganese Limited was in the process of seeking environmental approval to conduct exploratory activities. In response to public concerns a moratorium on seabed mining was introduced which brought these activities to a halt (see below).

Additional mineral exploration applications were submitted by Territory Minerals to explore around Anson and Hyland Bays and Dooley point on the Territory's west coast; and Ocre Resources for coastal waters of northern Arnhem Land around Howard and Elcho Islands.

There are currently no active mineral exploration licences in Commonwealth waters (3 nautical miles offshore out to our maritime border).

The Moratorium on Seabed Mining

On March 6th, 2012 the (then) Labor Northern Territory Government placed a Moratorium on both exploration and seabed mining activities in Territory waters for a period of three years. Since March 6th 2015, the Moratorium was again extended for an additional three years, until 2018. The Moratorium was effective immediately and included projects with existing licences. The Government instructed the Environmental Protection Agency to conduct a comprehensive assessment of the actual and potential risks and impacts of seabed mining. The Moratorium does not include petroleum exploration, production or port development. Since forming government the Country Liberal Party has agreed to a permanent moratorium on seabed mining only in Territory waters around the coast of Groote Eylandt due to the great cultural and environmental importance of this area. This does not apply to the rest of Territory waters yet.

Major Risks and Impacts of Seabed Mining

Seabed mining is a significant and unprecedented threat to Top End sea life. It can cause a wide range of environmental problems through altering the existing physical, chemical and biological balance of marine ecosystems. These far-reaching impacts would pose an enormous challenge to rehabilitate if not be impossible to rehabilitate. Therefore the impacts of mining the seabed need to factor in long-term changes to the environment.

International seabed mining projects have identified the disturbance of seafloor sediment as the most significant short-term impact of the industry. Dredging and dumping of the spoil has well-documented and devastating impacts on local sea life including fish breeding and nursery areas and important habitats, causing the death and disruption of seafloor organisms and affecting the ability of plants to photosynthesise.

Below is a summary of key impacts and risks of seabed mining as identified by the NT Environmental Protection Agency and in reports by independent scientists (for a list of references please visit sealife.org.au):

- Removal of the seabed sediment and the organisms which live within them;
- Introduction of foreign materials to the sea, such as processing wastes and tailings;
- Increase in heat, light and/or seismic and acoustic waves to the area;
- Changes in wave dynamics including the patterns and directions of currents;
- Changes in the rates of beach erosion and sediment deposition with potential to completely change the coastline;
- Alteration in the amount of particulates present in the water column with resulting impacts upon light penetration and hence plant photosynthesis;
- Increased interaction of marine life with vessels servicing the mining project;

- Changes in the water quality through introduction and release of nutrients and toxins will ultimately impact the population dynamics and behaviour of plants and animals; and
- Alterations in species relationships, such as food web dynamics, predator-prey relations, as well as the overall impacts on the productivity of the surrounding area.

Around 84% of the Territory's coastline is owned by Aboriginal people. While their right to veto mining in the intertidal zone does exist, beyond the intertidal existing legal rights are not as strong. As a result there is great community concern about intentions of miners beyond the intertidal and for the protection of sacred sites and dreaming tracks in the sea as well as overall marine health.

Seabed mining amounts to strip mining the sea floor. This mining method has often-irreversible impacts when conducted on land and the impacts of it in the sea are incredibly complex and unlikely to be manageable. A precautionary approach should guide decisions about the future of seabed mining in the Northern Territory. The true environmental, social and economic costs will outweigh purported benefits.

The Australian Marine Conservation Society does not support seabed mining in the Top End and urges the Northern Territory Government to maintain and strengthen the existing moratorium to permanently protect Territory waters from this destructive activity.

Add your voice to the Territorians calling for a permanent ban on seabed mining. Sign up for further information and stay informed, visit: www.sealife.org.au/join or like us on facebook at www.facebook.com/topendsealife

Take Action to Protect our Top End from Destructive Seabed Mining!

The NT is at risk of seabed mining! In 2018 the current moratorium comes to an end. Help urge the Government to think twice about carving up our oceans and sign the petition to put a permanent end to seabed mining in the Northern Territory. **SAY NO TO TOP END SEABED MINING!**