

STATEMENT OF REASONS

for the draft declaration of prohibited action: Subsea Mining

BACKGROUND

1. 'Seabed mining' refers to the exploration and extraction of sub-sea minerals and extractive minerals for commercial gain. It is a relatively new and evolving industry. Worldwide there are very few seabed mining projects, and limited information available to identify and inform 'best practice' environmental management and rehabilitation in the marine environment.
2. On 6 March 2012, in response to strong community concerns regarding the limited knowledge and information about the environmental impacts of seabed mining and management, the Northern Territory Government introduced a moratorium on exploration and mining in the Northern Territory (NT) coastal waters, until a review of the actual or potential impacts of seabed mining was undertaken to provide a basis for the assessment of possible future development and sustainability of the industry. The Northern Territory Environment Protection Authority (NT EPA) and the Aboriginal Areas Protection Authority (AAPA) were requested to provide advice to inform the review.
3. In December 2020, the NT EPA provided its 'Review of Seabed Mining in the Northern Territory – Environmental Impacts and Management' Final Report (the NT EPA Report) and a Consultation Report which provides an overview and summary of the feedback received during the NT EPA's public consultation process on its draft report. In January 2021, AAPA provided its 'Review of Seabed Mining in the Coastal Waters of the Northern Territory: Report of the Aboriginal Areas Protection Authority' (the AAPA Report).
4. The terms 'seabed mining' and 'subsea mining' have the same meaning and are interchangeable terms. 'Subsea mining' is the emerging preferred term for seabed mining and therefore used in the draft declaration and this statement of reasons.

DECISION PROPOSING TO DECLARE A PROHIBITED ACTION

5. As the Minister for Environment, I propose to declare a prohibition on subsea mining using my powers under section 38 of the *Environment Protection Act 2019* (EP Act). This prohibition will apply to all activities associated with the exploration for and mining of mineral resources in NT coastal and intertidal waters.
6. In making this decision, I have considered and applied the principles of ecologically sustainable development (ESD) and the objects expressed in the EP Act, together with the advice contained in the reports from the NT EPA and the AAPA (collectively the subsea mining reports).
7. My decision is based on:
 - the important values of the coastal and marine environment
 - the potential impacts on the coastal and marine environment and sacred sites
 - the limited information available and uncertainty about how to effectively and appropriately manage these impacts or to rehabilitate the seabed once mining is complete

- the potential impacts on the NT's existing marine resource based industries, such as fishing, aquaculture, pearling, and tourism
 - the complexities of managing a new and emerging industry in a highly dynamic environment.
8. I am satisfied that the coastal and marine environment of the NT should be protected and that a declaration prohibiting subsea mining is necessary and consistent with furthering the objects of the EP Act.
9. My reasons are explained further below.

REASONS

10. I have had regard to the definition of 'environment' under section 4 of the EP Act that encompasses physical, biological, economic, cultural and social aspects.

Value of the coastal and marine environment

11. NT waters are shallow, relatively clear and highly dynamic. Territory coastal and marine areas are largely intact and unspoiled, encompassing several seas and major estuaries, rich in natural resources, biodiversity, cultural heritage and supporting a range of regional and local economies and livelihoods.
12. NT coastal and marine environments contain values that are of national and international significance, and include a rich marine fauna (such as dolphins, whales, dugongs, birds, reptiles, and fishes), extensive coastal and benthic habitats (such as seagrass beds, mangrove communities) and complex processes that drive these systems.
13. Cultural and social integrity is of paramount importance to protect Aboriginal connections, songlines, dreamings, sacred sites and the traditional values of Aboriginals.
14. Community and social values associated with tourism, fishing and recreational activities is also integral to Territorian's livelihoods and lifestyle.
15. NT marine and coastal waters also contain underwater cultural heritage such as submerged Aboriginal cultural landscapes, Aboriginal and Macassan archaeological sites and shipwrecks, aircraft and other shipwrecks, and maritime infrastructure.
16. The values of the coastal marine environment are highly treasured by Territorians for their natural, environmental, cultural (Aboriginal and non-Aboriginal origin), and recreational importance.
17. I am satisfied there are physical and biological, social and cultural features of the environment that are worthy of protection.
18. The coastal and marine environment also provides important economic value from natural resource and marine-based industries such as fishing, aquaculture, pearling and tourism. The Final Report of the Territory Economic Reconstruction Commission

(TERC Report) identifies that tourism has the highest job creation potential of all the sectors across all regions.

19. Economic, social, cultural and biological values are inherently connected with each other and the environment.
20. I am satisfied there are economic features of the environment that are worthy of protection. I am satisfied that these existing economic values should be given greater protection and acknowledgement than the potential economic benefits of an untested industry.

Knowledge of potential impacts

21. There are a wide range of potential direct and indirect impacts to the marine environment and environmental values that can occur through the extraction of mineral resources from the seafloor.
22. The NT EPA Report identifies the risks and potential impacts on coastal and marine environmental values of the NT. Whilst the NT EPA's Report did not explicitly discuss mining in intertidal areas, it noted that impacts and management approaches would be similar to those associated with subsea mining more broadly.
23. The AAPA report identifies the risks and potential impacts on sacred sites within coastal waters of the NT.
24. Subsea mining has the potential to directly impact coastal processes, marine environmental quality, marine ecosystems and habitats, marine flora and fauna, Aboriginal sacred sites and areas of cultural significance (for example, songlines and underwater cultural heritage) and other potential impacts such as creating safety issues for marine traffic and other users coming into contact with mining activities.
25. Subsea mining also has the potential to indirectly impact all of these matters due to the interconnectedness of the marine environment, including coastal waters and the intertidal zone. For this reason I consider it is appropriate to extend the prohibition to the intertidal zone. Intertidal areas are essential to the existence of many marine and coastal environmental values.
26. I am satisfied that there is the potential for wide-ranging impacts on the environment from subsea mining.

Information and uncertainty

27. The subsea mining reports identify a lack of adequate environmental information and knowledge about the existing condition of environmental values and the potential impacts from subsea mining, as a major constraint on management and mitigation of risks from subsea mining.
28. Baseline information on sacred sites, underwater heritage and on the distribution and abundance of many marine species and their habitats is lacking, as is an understanding of the processes that drive these populations and how disturbance from extraction, processing and transportation would impact them.

29. Having an adequate knowledge base is critical in predicting and assessing environmental impacts and developing appropriate mitigation measures. The lack of adequate information contributes to the uncertainty regarding the effectiveness of management and mitigation measures.
30. Significant investment in scientific research and information gathering would be required prior to authorising activities to extract mineral resources from the NT coastal and marine waters.
31. There remains considerable uncertainty about the nature and extent of potential impacts. I am satisfied that the level of uncertainty and lack of information requires substantial investment in research and knowledge building to address the gaps and reduce uncertainties, thereby warranting the application of the precautionary principle.

Regulatory environment

32. Legislation specifically aimed at managing subsea mining rights and activities does not exist in the NT. Subsea mining activities would be managed under existing legal frameworks the same way as mining activities conducted on land.
33. I consider that the NT's mineral titling system may be well able to manage the grant of titles over NT coastal waters. I have concerns, however, about the ability for mining operators to limit their environmental impacts to within the boundaries of the mineral title given the interconnectedness of the coastal and marine environment.
34. The subsea mining reports identify matters and the challenges that would need to be addressed in order to ensure the regulatory framework is capable of managing a subsea mining industry and to enable the industry to obtain the necessary social licence to operate.
35. Such work ranges from requirements to reform legislation, develop policy and technical guidelines to ensuring government, the NT EPA and regulators have the capacity and expertise to deliver policy and technical guidance, rigorous environmental impact assessment and regulatory oversight of a new and complex industry.
36. At this time, I am satisfied that substantial work will be required to ensure that regulation is capable of managing subsea mining activities to meet the objectives of the EP Act.

Public submissions

37. I have had regard to the views in the submissions to the NT EPA including those that support subsea mining and those that do not. Consideration of stakeholder and community views has informed my decision to commence this declaration process.

Ecologically sustainable development

38. I have taken account of the meaning of ESD and the principles of ESD set out in Part 2, Division 1 of the EP Act. I consider that all the principles of ESD are relevant to my decision with particular regard to the application of the precautionary principle. The precautionary principle is directed towards the prevention of serious or irreversible harm to the environment in situations of scientific uncertainty.
39. I am satisfied there is an extensive scientific knowledge gap on the impacts of subsea mining and scientific uncertainty as to the extent of the potential damage to the environment. At this point in time, scientific knowledge and information is incomplete or lacking and unavailable.
40. I am satisfied that a prohibition on subsea mining is consistent with the principles of ecologically sustainable development.

Objects of the *Environment Protection Act 2019*

41. The statutory purpose of the EP Act is to “provide for the protection of the environment and for related purposes”. This purpose is further entrenched in the objects of the EP Act.
42. As part of my decision to propose a prohibition on subsea mining, I have considered the purpose and the objects of the EP Act, recognising however, that sections 3(c) and (d) relate to the environmental impact assessment process and are not relevant to my decision to commence the declaration process.
43. Having regard to all of the above, I am satisfied that the decision to propose to declare subsea mining as a prohibited action is necessary and consistent with furthering the objects of the EP Act.

Draft declaration to prohibit

44. In accordance with the Environment Protection Regulations 2020, I have prepared a draft declaration to prohibit mining activity as defined under section 4 of the MMA within NT coastal waters and the intertidal zone. The prohibition does not include certain activities associated with mining that are for minerals mined outside of the NT coastal waters or intertidal zone. The reasons these were excluded is to ensure that there is no unintended consequence of inhibiting existing activities that are not in connection to subsea mining activities – including but not limited to:
 - dredging
 - works in connection with tunnels, wells, pipelines, conduits or cables
 - petroleum exploration and production
 - bioprospecting and removal of subsea living or organic matter
 - carbon sequestration and subsea gas storage
 - activities for the purpose of facilitating shipping and navigation, and
 - transportation and the construction and maintenance of transport infrastructure such as ports, barges, railways, marinas, and bridges.

45. Due to the high connectivity between terrestrial environments, intertidal areas and the marine environments of the NT, the area subject to the draft declaration includes the high water mark, due to the nature of tides and river systems in the NT which can be subject to the ebb and flow of the tide, but will not extend further inland than the high water mark. This would capture flows seawards but not inwards.



Hon Eva Dina Lawler MLA,
Minister for Environment

6 May 2021