



WA Government Challenge

Challenge 1: What are the best ways for Western Australian institutions, systems and scientists, traditional owners, Aboriginal communities, custodians, and proponents of development proposals to work together to build the coastal and marine knowledge base needed for marine science and shared custodianship in marine resource management?



Aligns with Decade Challenge

Challenge 10: Ensure that the multiple values and services of the ocean for human well-being, culture and sustainable development are widely understood, and identify and overcome barriers to behaviour change required for a step change in humanity's relationship with the ocean.

Context

It is intended that this project will identify methods to incorporate Aboriginal cultural and scientific knowledge within Western Australian marine science, contributing to enhanced/collaborative decision making, shared management outcomes, and improved research and management of Western Australia's marine environment. Management of natural resources requires partnerships between varied and diverse stakeholders. A key element in shared management is ensuring that all stakeholders have equitable access to knowledge, resources and expertise to ensure equity in decision making, setting priorities, and implementing research and monitoring programs. In Western Australia, traditional owners are recognised as having responsibilities for the management of marine resources on native title lands, with all marine protected areas managed through a joint management approach based on trust, recognition, mutual respect and shared goals. Outside of native title lands, there is an increasing recognition of the importance of traditional/cultural knowledge in environmental management with a range of goals including improved management, impact assessment and mitigation, and strengthened connections between communities and traditional lands.

While decision-making is underpinned by science, historically this has not always included the foundational understanding of cultural activities and local knowledge that is important to traditional owners and underpins their decision making. Western science findings and the appropriate skills to implement monitoring programs are not always available to traditional owners to ensure they have a shared level of understanding when decisions are made. Further, outside of native title lands traditional owners may not have a direct role in ongoing management of culturally important marine areas. Two way sharing of knowledge is becoming increasingly recognised as best practice in environmental management to ensure all parties have the best information available for decision making and management purposes. This includes understanding values, goals and aspirations, and existing knowledge as well as the tools and techniques to continue to gather information.

To meet this challenge a project could demonstrate and validate culturally appropriate engagement mechanisms, including but not limited to:

- incorporating an understanding and appreciation of the values, priorities and cultural activities of local Aboriginal communities for sea country;
- two way sharing of knowledge between local Aboriginal communities, land/marine managers and the scientific community, including foundational knowledge, methodologies and techniques to acquire information as well as the communication tools to share it;
- culturally appropriate and transparent protocols guiding engagement, curation of knowledge and management of information;

It is intended that the project will be applied to one or more of the following living case studies, and have potential to be applied across Western Australia's coastline. The following potential case studies have been included to highlight different means of approaching this challenge including through a focus on enhancing shared responsibilities for the management of sea country and/or means of capturing and showcasing indigenous knowledge for ongoing environmental impact assessment and management.



Case Study 1 - Aboriginal Cultural Knowledge, Science and Derbal Nera (Cockburn Sound)

Summary

Derbal Nera (Cockburn Sound) has been established as the future home of Western Australia's new container port (Westport). Under the Westport Delivery Strategy, social and environmental outcomes are sought to be optimised by collaborating with stakeholders from the outset to identify opportunities for improving the environment, community values and assets. The Westport project aims to genuinely deepen knowledge and understanding of Nyoongar cultural values and scientific knowledge within Derbal Nera to consider how to incorporate these values into its marine science program, ongoing management, environmental impact assessment and potentially a future revision of the State Environment (Cockburn Sound) Policy. Engagement has commenced with Nyoongar stakeholders to understand values and deliver on benefits (economic and cultural) to the local communities. These discussions have highlighted the opportunity to understand Nyoongar cultural values and scientific knowledge and incorporate these values and knowledge into environmental impact assessment and management of Cockburn Sound. The Westport team is aware of the importance of knowledge around songlines, storylines, historical sea level changes, totem animals, and would like to use these to build a holistic understanding of Derbal Nera, not only from a cultural perspective but also with tangible outcomes and learnings for the environmental management of Derbal Nera.

Nominating Agency: Westport Program Office (Department of Transport).

End users: Cockburn Sound Management Council, Department of Water and Environmental Regulation, Department of Primary Industry and Regional Development, Kwinana Industries Council, the City of Cockburn, Town of Kwinana and City of Rockingham, local Aboriginal communities.

Case Study 2 - Building shared capacity for management of coastal resources with traditional owners across Western Australia with a focus on threatened and migratory megafauna

Summary

The Department of Biodiversity, Conservation and Attractions (DBCA) is responsible for the management of marine protected areas in Western Australia through a joint management approach and is also responsible for the management of threatened marine fauna, many of which are intricately embedded in Indigenous culture throughout Western Australia. While traditional owners have a role in decision processes, information for decision-making and the appropriate knowledge and skills to implement programs is not always effectively communicated. DBCA is aware of the importance of working together with traditional owners to identify shared priorities for marine resources, and finding effective ways to share knowledge including techniques and technologies that will enhance two way sharing of knowledge. The focus of this project would be on using current experience and learnings to develop a framework for building shared capacity to manage coastal resources with traditional owners, both on and off reserve. This would include working together to identify shared priorities for marine resources, sharing knowledge including techniques and technologies, developing appropriate training and designing communication tools and information storage and access that will enhance two way sharing of knowledge. Threatened and migratory megafauna, namely marine turtles and marine mammals, have high values locally, nationally and internationally and are a focus of State and National plans and international agreements. Shared management priorities for research and monitoring for these species needs to inform the development and application of implementation plans. DBCA has been working with a number of indigenous saltwater communities across the Kimberley through joint management arrangements and research collaborations to better understand shared priorities for marine resources and how to meet research and monitoring needs together. The initial focus has been on turtle, dugong and seagrass resources and a collective of saltwater groups is developing a turtle and dugong management plan. The proposed project could progress and enhance these existing initiatives in joint management and expand the activities to encompass more traditional owner groups.

Nominating Agency: Department of Biodiversity, Conservation and Attractions.

End users: Department of Biodiversity Conservation and Attractions, Traditional Owners, local Aboriginal communities, Indigenous Ranger Groups, joint management bodies (e.g. Land Councils), Department of Primary Industries and Regional Development, other jurisdictions responsible for the management of migratory species.