



**Marine
and Coastal**

Supporting regional planning in northern Australia

National Environmental Science Program

Project 1.32

The Australian Government's White Paper for Developing Northern Australia is focused on realising the full economic potential of the north, including a plan for implementing these policies over the next five, ten and twenty years. Development in northern Australia has had bi-partisan political support for many years and thus receives significant policy and funding profile. However, the agenda is widely considered to have under-achieved against its aspirations, operating in a heavily contested space and resulting in poor outcomes for development and the environment. With little strategic regional planning effort across the landscape, disputes over environmental issues are central to this contestation, impacting development proponents, government agency decision-makers, Traditional Owners and affected communities. Our research is designed to make a positive contribution to easing (often known as de-risking) this contested landscape.

To assist in achieving sustainable development in the north, we are enacting a project that contributes to regional planning based on integrating high quality ecological data, a comprehensive understanding of stakeholder needs, informing legislative and planning requirements and respect for Traditional Owners rights and aspirations. This project, via a series of workshops across the north, will identify new pathways to achieve positive planning outcomes and explore improved approaches to the way the unique environment of Northern Australia can be better managed and protected. This project is a collaboration between the NESP Marine and Coastal Hub and the CRC for Northern Australia, thus covering terrestrial, marine and socio-economic issues in strategic partnership. The project will also work closely with the Western Australian, Queensland and Northern Territory Governments.

We propose to contribute to de-risking by filling conceptual, information and knowledge gaps at large spatial scales, creating data layers of the distribution of terrestrial, marine and coastal resources across northern Australia. Figure 1 shows how information (expressed as data layers) from many different types of projects

(marine resource mapping, threatened species distribution, climate change (sea-level rise), Indigenous cultural values, economic values and development precincts all combine to assist with the decision-making processes.

A key issue is availability of agreed data/information/knowledge to all parties. To achieve the data layers illustrated below requires the production of broad-scale data layers using consistent approaches. This project will have a three-tiered approach to compiling, standardising and visualising these layers which will be interrogatable by interested parties to make the necessary decisions for future planning in the north:

Production of consistent data layers:

- Environmental - Habitats, species distribution, resource mapping, climate, soil
- Social and cultural values and sites
- Economic value, green economies and new economic opportunities (i.e., blue carbon)
- Tenure, planning and development zoning

Data wrangling:

- Identify existing data sources
- Develop mechanisms for expressing consistency across this data
- Consider mechanisms for integrated decision support
- Identify gaps and determine how to fill data and decision-making gaps

Planning:

- Enabling a strong system of prioritising, planning, assessing and approving sector development proposals while protecting our natural and cultural assets
- Support significant, evidence-based policy and land use planning to guide development that is owned within the broader regional community
- Ensuring data is publicly available, visual, interrogatable platform to enable and able to inform decision making at scale.

Case Studies:

This project will develop a research strategy to carry out place-based case studies in 'key development areas', that will showcase a real-world conceptual and methodological approaches for protecting biodiversity and cultural assets within a sustainable development framework. Future case study locations are currently being considered in deep engagement with industry, the jurisdictions and the Commonwealth.

This scoping study will provide a systematic approach that incorporates biophysical, policy, regulatory, and cultural feasibility of potential case study areas for future research investments that we anticipate making in this Hub. Importantly, these areas will provide realistic options for sustainable development by incorporating the ongoing goals from the States, Councils and Traditional Owners as well as identifying key gaps to support further assessments.

