

# Kimberley Marine Research Program

WAMSI Project 1.5

## Kimberley Indigenous Saltwater Science Project

The Kimberley Indigenous Saltwater Science Project (KISSP) is a collaborative project with the overall aim of improving the way in which collaborative research involving Traditional Owners and the science community is planned, assessed and undertaken in Kimberley saltwater country.<sup>1</sup>

*"(If) you want to learn about the essence of how science works, how people learn to solve practical problems, the answer may be clearer in an Aboriginal community than in a high-tech laboratory."*<sup>2</sup>

### About the project

The KISSP project is funded by the Western Australian Marine Science Institution (WAMSI) and steered by representatives from the Balanggarra, Wunambal-Gaambera, Dambimangari, Bardi-Jawi, Nyul Nyul, Yawuru and Karajarri peoples. It is supported by Charles Darwin University, the University of Western Australia, Nyamba Buru Yawuru and the Kimberley Land Council.

While the KISSP project runs from January 2016 through to mid-2017 it aims to leave a legacy of stronger relationships between land and sea researchers and Kimberley Traditional Owners.

### Background

The Kimberley has a wealth of natural features, with large areas of remote and largely intact terrestrial and marine ecosystems throughout. The ecology and species of the Kimberley marine



ABOVE: Indigenous community representatives from the Karajarri and Yawuru peoples meet in Broome to workshop outcomes of the KISSP project (Notre Dame University Hall, June 2016)

environment continue to be a focus for visiting researchers just as their management and care continues to be the responsibility of Traditional Owners.

The KISSP project is founded on an understanding that *Indigenous knowledge holders are scientists in their own right*<sup>3</sup> and that a combination of Western Science and Traditional Knowledge together play a critical role in supporting the management of land and sea country in contemporary Australia.

Through a series of planning meetings and conversations amongst Traditional Owners of seven Indigenous saltwater groups of the Kimberley, an initial research theme proposed by WAMSI was tailored to suit local priorities and aspirations.

<sup>1</sup>The outcomes of the project may also be applicable to terrestrial research.

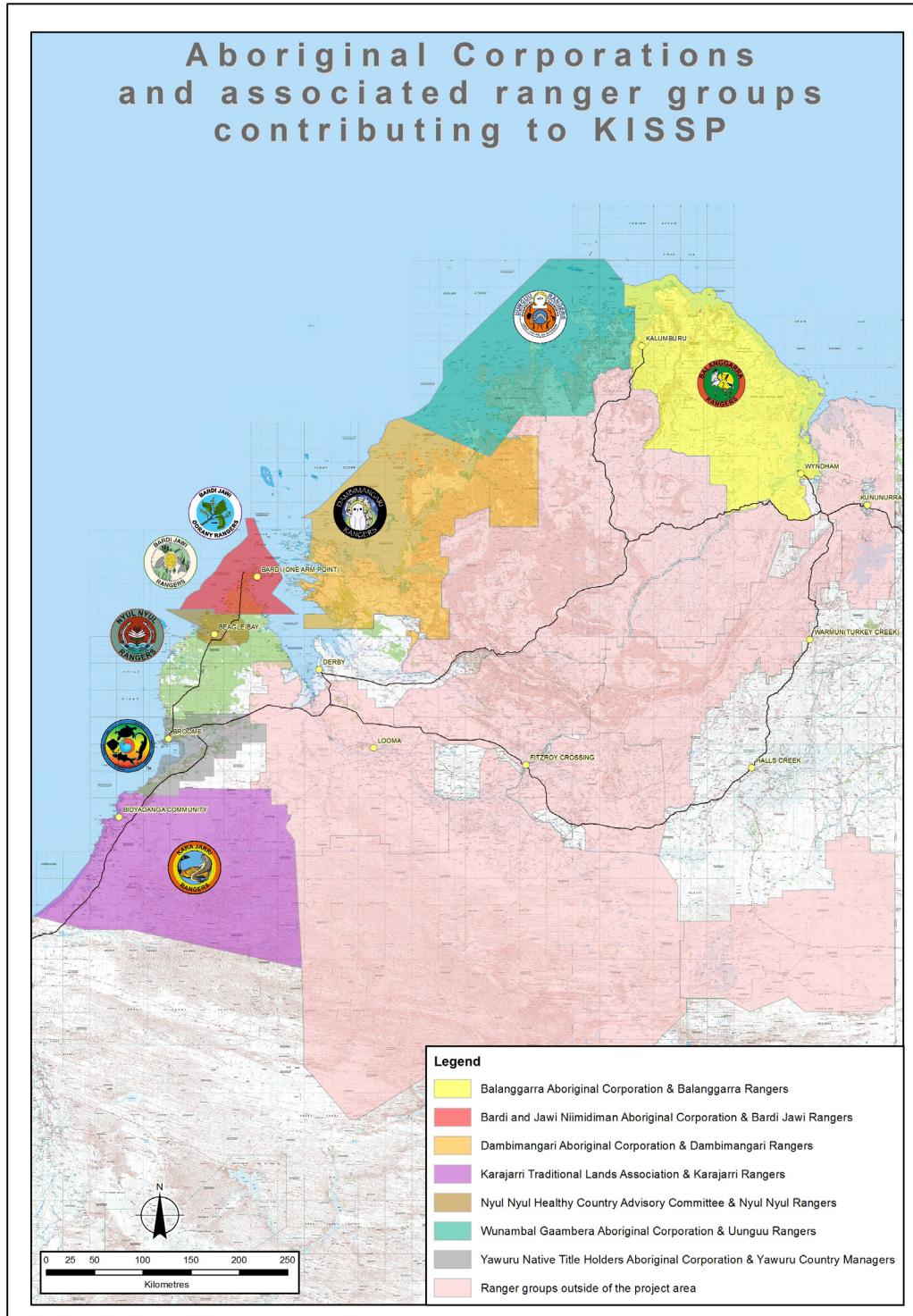
<sup>2</sup>Ray Norris, Chief Research Scientist, CSIRO Astronomy & Space Science

<sup>3</sup>Karajarri Traditional Owner



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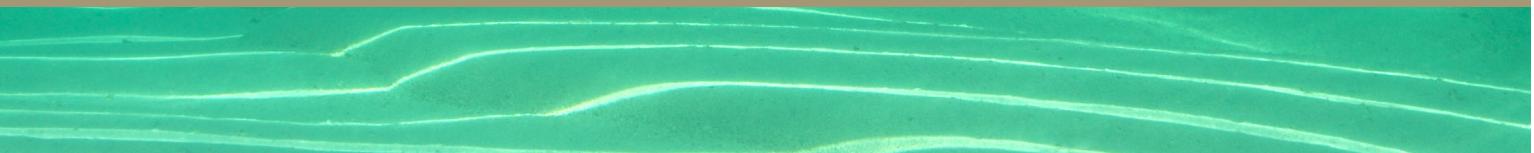
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*IMAGE 1. Map showing the Aboriginal Corporations and Indigenous Ranger Groups partnering in the Kimberley Indigenous Saltwater Science Project - KISSP (courtesy of the Kimberley Land Council, 2016)*

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The result is a strong partnership between all of the stakeholders contributing to the project, their sustained commitment towards the project outcomes and a work plan aimed at improving the Indigenous-Western science interface in the region.

### Research Objectives

During the planning stages, the project team identified three core areas of work required to address some of the current challenges experienced by both Kimberley researchers and saltwater managers around research activities. The project has been developed around these areas of work, described as three closely aligned core objectives. In short these are:

1. Integrate Traditional Ecological Knowledge and management practices into Kimberley marine conservation and management (led by Dr Beau Austin of the Research Institute for the Environment and Livelihoods, Charles Darwin University, Darwin)
2. With Kimberley Prescribed Body Corporate<sup>4</sup> and Indigenous community members, develop a standard research protocol for land and sea research in the Kimberley (led by Gina Lincoln of Mosaic Environmental for the Kimberley Land Council, Broome)
3. Develop a standard framework for marine monitoring in the Kimberley<sup>5</sup> with Indigenous ranger groups, (led by Rebecca Dobbs and Fiona Tingle of the Centre for Excellence in Natural Resource Management, University of Western Australia, Kununurra/Broome)

### The Approach

The Working Group's composition of Indigenous representatives from seven



*ABOVE: Nyul Nyul Rangers meet with members of the KISSP research team to talk about the ways in which monitoring is undertaken on Nyul Nyul saltwater country (Nyul Nyul Ranger HQ, June 2016)*

saltwater peoples of the Kimberley coastline gives the project its core strength. Their participation in the project is supported by a network of staff from local Indigenous Ranger groups and representative bodies.

Initially, through a formal process the working group carefully considered and appointed those researchers who aligned best with each project objective.

Working group members have since delivered on the nuts and bolts of the project by co-facilitating workshops in each of their respective communities with significant buy-in from local Indigenous community members.

The regional representatives act as conduits for information to and from the working group to their communities, where the decisions for management actions and project development take place. They meet monthly to steer the project, contribute their ideas, share opportunities and guide their research team.

### Initial Findings

At the time of writing this update, more than 100 Indigenous community members, Indigenous rangers and Indigenous Projected Area staff, from seven Kimberley saltwater communities have contributed their time and their knowledge to the project.

Similarly, numerous western scientists from a range of research institutions with research experience in the Kimberley in addition to researchers working for various Indigenous organisations have provided valuable input into the project as it develops.

<sup>4</sup>Prescribed Body Corporates are representative bodies established for each Native Title determination. Read more about them [here](#).

<sup>5</sup>A sub-project attached to Objective 3 is the development of a pilot training package for Indigenous Ranger groups around one selected saltwater monitoring methodology.

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With the bulk of the broader community consultations complete, the KISSP research team is now entering the phase of data collation and interpretation. A number of preliminary findings are emerging through this process, with some key points included below:

- Synergies are being seen in many of the challenges experienced by researchers working in the Kimberley and the Indigenous people who enable this work through the process of research project development, proposal assessment and agreement brokerage.
- There is a large amount of land and sea research being done throughout the Kimberley. The sheer volume of research applications consumes a significant amount of resources in terms of both paid staff from numerous Indigenous organisations as well as unpaid time by Indigenous community members.
- Ranger groups undertake a variety of research and monitoring practices to inform their land and sea local management programs. Currently, these projects range from those driven by western scientists and their research agendas; projects that involve western scientists as co-researchers with local Traditional Owners; through to those undertaken by Ranger groups in direct response to local priorities and specific management issues.
- Research projects that are not developed with Traditional Owners and which don't align with local land and sea management priorities as identified Healthy Country Plans<sup>6</sup> have a lower likelihood of support and longevity.

**Traditional Owner:** *Researchers are coming to us all of the time. They push their own agenda.*

- Traditional Owners continue to undertake monitoring of saltwater country as part of their age-old traditional customary practices. This foundational scientific knowledge informs all other land and sea research currently being done in the Kimberley.
- There is a significant cross-over in the topics of research and monitoring undertaken by the different Kimberley saltwater Ranger groups. The techniques employed by groups often differ in response to local environments, cultural practices, resources, remoteness, local knowledge and experience. There is a drive within these groups to find a common thread within monitoring practices that allows Traditional Owners to better visualise a regional picture of ecosystem health.
- Traditional Owners have rich knowledge of saltwater Country along the Kimberley coast that is based on both lived experience and the passing on of stories, practices and beliefs from Old People to Young People for countless generations. This knowledge is highly useable in research and M&E contexts, as well as the practical management of natural and cultural resources in the marine environment

**Traditional Owner:** *Old people have been looking after our environment – fish, plants and animals forever. Quite often, for a lot of our plant and animals we can refer to dreamtime stories to get information on these species.*

- Many researchers have been surprised by just how reliant their work has been on the contributions of Indigenous knowledge holders and they have grown to place great value on the traditional knowledge they were given.

**Researcher:** *Traditional knowledge was crucial to our fieldwork as we needed information on where our targeted taxa occurred and (under) what conditions we could sample them.*

- Many scientists aspire to return to the communities they worked with and give back the knowledge they developed through the off-site interpretation of their research work. Unfortunately, many have not understood how critical this part of their research would be when developing the research project budget and find themselves without the funds needed to return to communities.
- Traditional Owners generally have a strong desire to integrate western science to help look after Country, contingent upon research being done in a way that acknowledges and respectfully complements the knowledge held by Traditional Owners. This can be done through the establishment of long-term relationship based on trust, as well as the passing on of research knowledge and skills to Traditional Owners.

<sup>6</sup>Healthy Country Plans exist for much of the Kimberley traditional land and waters. In some places these are in development and in others they link with Indigenous Protected Area plans.

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- Researchers who have invested in their own cultural competence and in developing personal relationships with the community people they work with, see this as a crucial part of their research process.

**Researcher's recommendations to colleagues:** *Travel there and meet everyone personally to discuss the project prior to everything else*

### Next Steps

The KISSP working group continues to meet every calendar month to progress the project and maintain a regional view of marine research and management in the Kimberley. They will continue to invite marine researchers with a depth of experience in the Kimberley to present at these meetings and look for opportunities to apply their research methods and findings to Indigenous saltwater management priorities.

The research team are using all of the information provided by community members, staff and researchers, in the production of a specified series of end products. Over two days in October 2016, the working group, their research team and project partners will meet in Broome to workshop the various components of each project objective and guide the development of these documents:

#### 1. *Integrated Intercultural Management of Kimberley Saltwater Country*

A report that will use information from Traditional Owners, Rangers and Prescribed Body Corporate Directors to describe the types of knowledge, practices and beliefs held by Kimberley Saltwater Traditional Owners and how they can be integrated with Western Science to

produce best practice management of Kimberley Saltwater Country. This report will support and provide important context for the Monitoring and Evaluation Toolbox/Framework.

#### 2. *Monitoring and Evaluation Framework*

A report that will use workshop outputs, a review of current ranger monitoring techniques and healthy country priorities to develop a framework and protocols that can be used by sea rangers to monitor saltwater country across the Kimberley. It will also describe a way forward for regional monitoring across the Kimberley by using the protocols in the framework and sharing data cross country.

#### 3. *Kimberley Research Protocols*

A process that Kimberley Traditional Owners, their supporting organisations and their committees can use to guide the development of land and sea research. Kimberley saltwater Prescribed Body Corporates will be involved in the development of this protocol and each will decide on the suitability of applying it to land and sea research within their own jurisdictions.

#### 4. *A guide for researchers*

A set of documents for provision to research institutions and their researchers to increase their understanding of the Kimberley, its Indigenous people and culture; supporting them to plan their research the right way for Traditional Owners and to engage in partnerships with them.

#### 5. *Pilot training package*

A training resource for ranger groups on one type of marine monitoring done by rangers in Kimberley saltwater country. This will focus on the foundational skills, field method and science behind the monitoring technique.

### Who will use this information?

On completion of the project in June 2017, it's expected that the project will deliver an improved evidence base for planning and managing marine parks in the Kimberley.

Information generated as part of this research will also be of relevance to the [Kimberley Science and Conservation Strategy](#), the proposed Great Kimberley Marine Park network and Healthy Country Plans of Indigenous partners.

### Contact

If you would like to know more about the project or would like to be involved, please contact us.

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