# Concept Plan SP 2017-058

# Aerial survey of marine turtle rookeries of the Pilbara Region of Western Australia

**Marine Science** 

## **Project Core Team**

Supervising ScientistSabrina Fossette-HalotData CustodianSabrina Fossette-Halot

Site Custodian

Project status as of Feb. 4, 2020, 9:51 a.m.

New project, pending concept plan approval

Document endorsements and approvals as of Feb. 4, 2020, 9:51 a.m.

Project TeamgrantedProgram LeadergrantedDirectoraterequired



# Aerial survey of marine turtle rookeries of the Pilbara Region of Western Australia

#### **Biodiversity and Conservation Science Program**

Marine Science

#### **Departmental Service**

None

#### **Aims**

- Produce an inventory of flatback turtle nesting locations and seasonality (spatial and temporal distribution) on the North West Shelf
- Test new research methodologies that will improve monitoring efficiency, i.e. aerial survey and aerial imagery

#### **Expected outcome**

This project will provide us with a better understanding of the spatio-temporal distribution of flatback nesting activity on the North West Shelf. It will also provide us with information about nesting activity of the other species of turtles found in this area, i.e. green and hawksbill turtles. In particular, this project will provide us with:

- Map of presence/absence of turtle activity on the North West Shelf.
- Map of turtle nesting densities on the North West Shelf.
- Aerial imagery to develop an algorithm to automatically detect and identify turtle tracks.

### Strategic context

This project fulfils two goals of the NWSFTCP's Strategic Conservation Plan: NdS OA R1, NdS OA R14

The outcomes of this project will inform the National recovery plan for marine turtles in Australia as well as the IUCN database.

#### **Expected collaborations**

The first two steps of the project will not require external collaborations. The third step of the project, i.e. development of the algorithm, will be a collaboration with Outline Global Imagery, who are experts in the collection and analysis of geospatial imagery

#### Proposed period of the project

None - None

#### Staff time allocation

Role	Year 1	Year 2	Year 3
Scientist	0.02	0.05	0.05
Technical			
Volunteer		0.05	0.05
Collaborator			

#### Indicative operating budget



Source	Year 1	Year 2	Year 3
Consolidated Funds (DPaW)			
External Funding	63,567.99		