Concept Plan SP 2018-019

Cumulative risk assessment model for flatback turtles of the North West Shelf

Marine Science

Project Core Team

Supervising Scientist	Sabrina Fossette-Halot
Data Custodian	Sabrina Fossette-Halot
Site Custodian	

Project status as of Feb. 4, 2020, 1:39 p.m.

New project, pending concept plan approval

Document endorsements and approvals as of Feb. 4, 2020, 1:39 p.m.

Project Team	granted
Program Leader	granted
Directorate	required

Cumulative risk assessment model for flatback turtles of the North West Shelf

Biodiversity and Conservation Science Program

Marine Science

Departmental Service

None

Aims

The aim of this project is to build and run a cumulative risk assessment model for flatback turtles on the North West Shelf.

Expected outcome

The main outcomes of this project will be :
- Data layers of all human pressures affecting the North West Shelf flatback turtle stock.
- Maps showing the cumulative impact of these pressures on the stock and high versus low impacted areas.
- Identification of priority areas on the North West Shelf that need to be managed, monitored and/or protected to increase the conservation of flatback turtles.

Strategic context

This project will address objective NDS OAR6 of the NWSFTCP Strategic Conservation Plan 2014-2021.
The main management implications for this project are:

- to inform the NWSFTCP's next Strategic Conservation Plan and help prioritise areas requiring management, monitoring and/or protection based on the outputs from our model.
- to inform the next National Recovery Plan for Marine Turtles in Australia. The current plan lists all human pressures affecting the North West Shelf flatback turtle stock individually but does not take into account their cumulative impact. It is critical to identify relatively high and low impacted areas to assist the design of appropriate and effective future management actions.
- to use this project as a template to build similar models for other species of turtles and/or other stocks.

Expected collaborations

We anticipate a collaboration with researchers from The Nature Conservancy based in the USA. The Nature Conservancy has designed and built the software we are using to run our cumulative risk assessment model. A collaboration with them will help improve our understanding of the software and therefore maximise the outputs from the model.

Proposed period of the project

April 1, 2018 – June 30, 2019

Staff time allocation

Role	Year 1	Year 2	Year 3
Scientist S Fossette	0.1	0.1	0.1
Scientist G. Loewenthal	0.4	1	
Volunteer			
Collaborator			

Indicative operating budget

Source	Year 1	Year 2	Year 3
Consolidated Funds (DPaW)			
External Funding	34,406.82		