Mapping habitat in the Swan-Canning Estuary.

BCS Rivers and Estuaries Science

Project Core Team

Supervising Scientist   Kerry Trayler

Data Custodian   Josh Baker

Project status as of Aug. 5, 2022, 2:23 p.m.

New project, pending concept plan approval

Document endorsements and approvals as of Aug. 5, 2022, 2:23 p.m.

Project Team   granted

Program Leader   granted

Directorate   required

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Program

BCS Rivers and Estuaries Science

Departmental Service

Service 6: Conserving Habitats, Species and Communities

Background

Scientific effort for the Swan Canning has historically been focussed on water quality management, with little effort directed at characterising habitat. Some effort (Valesini et al 2009) focussed on nearshore areas to provide habitat and faunal inventories. And more recently, some effort has applied (Curtin University) using side scan sonar technologies to identify physically different environments but the work has not occurred broad scale or been adequately groundtruthed. There is therefore limited quantifiable information on the benthic habitat composition of the Swan-Canning Estuary (SCE).

Aims

The project focuses on the creation of broadscale habitat maps for the Swan-Canning Estuary. In the first instance the focus will be on the Lower Swan Canning with the intent to quantifiably analyse existing image data collected during 2019 surveys to produce a habitat composition (% cover) geospatial map layer of this area. Effort will be broadened to other areas to build more comprehensive map database for the waterway.

Expected outcome

This project aims to produce a broadscale habitat map (geospatial layer for GIS) that illustrates broad habitat composition within the LSCE.

Strategic context

Strategic Direction: Discover - [variant=australian]Use world-recognised science to build and share biodiversity knowledge to support evidence-based management
 Science Strategic Goal: [variant=australian]Scientific knowledge is available to support implementation of biodiversity conservation and recovery programs, and ecosystem management.
 RES Program objective: [variant=australian]Address priority knowledge gaps and communicate information to policy and decision makers through appropriate processes.
 Swan Canning River Protection Strategy: Improve understanding of the ecosystem through research

Expected collaborations

Collaboration with The Nature Conservancy and Murdoch University to access existing benthic images.

Proposed period of the project

Aug. 1, 2022 – Aug. 31, 2024

Staff time allocation

Role	Year 1	Year 2	Year 3
Scientist	30 Technical	10 Volunteer	
Collaborator			

Indicative operating budget

Source	Year 1	Year 2	Year 3
Consolidated Funds (DBCA)	47029	47029	
External Funding			