

# Two Bays January 2010 Science and Monitoring Program

**Project Title:** Marine Habitat Mapping – Western Port  
**Lead Agency / Scientist:**

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- Australian Marine Ecology – Matt Edmunds
- DSE/DPI/Worley Parsons (Deakin University)

**Purpose:** The two key objectives of the marine habitat mapping component of the program include:

- To ground truth LiDAR (airborne laser) data collected as part of DSE's *Future Coasts* program to produce habitat maps for intertidal areas in Yaringa and French Island Marine National Parks in Western Port
- To use side scan sonar to map the deeper channels within these MPAs where LiDAR was not able to penetrate and to ground truth this side scan data to produce habitat maps for the channels.

**Background:**

- Parks Victoria has a comprehensive marine habitat mapping program for the state's Marine National Parks and Marine Sanctuaries
- The Parks Victoria Marine Mapping Program was broken into two phases based on the technology used:
  1. Phase 1: Shallow-water mapping (<10m) using aerial photographs
  2. Phase 2: Deep water Marine National Parks (~10 – 105m depth) using multi-beam sonar to map habitats and bathymetry
- Parks Victoria is aiming to map some of the relatively few remaining Marine National Parks and Marine Sanctuaries that have not yet been fully mapped, including Yaringa and French Island Marine National Parks.
- Side scan sonar is another tool for mapping bathymetry and habitats and is becoming an increasingly affordable technology.

**Plan:**

- Video surveys across Yaringa and French Island to ground truth the LiDAR data to produce habitat maps and side scan sonar in the channels in the MPAs
- Surveys will be conducted in Yaringa and French Island MNPs on the 14<sup>th</sup> and 15<sup>th</sup> January respectively.

**Further Information:** [www.parkweb.vic.gov.au](http://www.parkweb.vic.gov.au)  
[www.climatechange.vic.gov.au](http://www.climatechange.vic.gov.au)

**Image:**

Mapping habitat within channels in the French Island Marine National Park requires an alternate approach because of the high levels of sediment in the water column.

