

# ENVIRONMENTAL AND SCIENTIFIC ISSUES

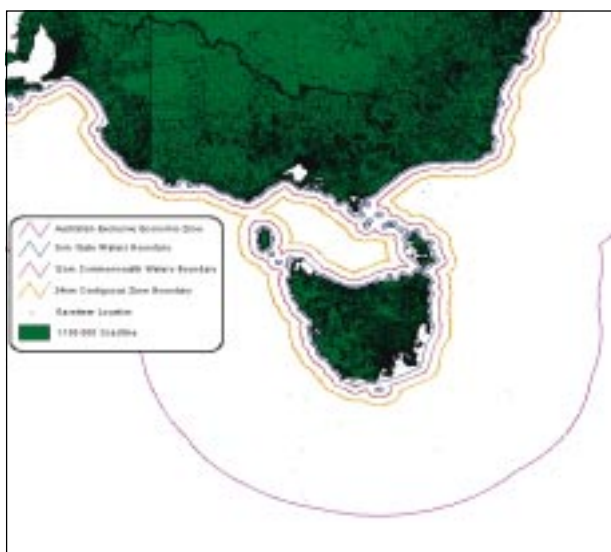
## OIL SPILL RESPONSE ATLAS

The Oil Spill Response Atlas (OSRA) provides Australian spill response organisations with vital environmental, wildlife and logistical information in a direct and easily managed form to allow a more efficient and effective response to oil and hazardous chemical spills at sea and in coastal regions.

The National Plan allocated \$180,000 towards the continuation of the OSRA program. This included the compilation of spatial data and imagery from the States/NT and the continuing development of a set of tools for use in the OSRA GIS system.

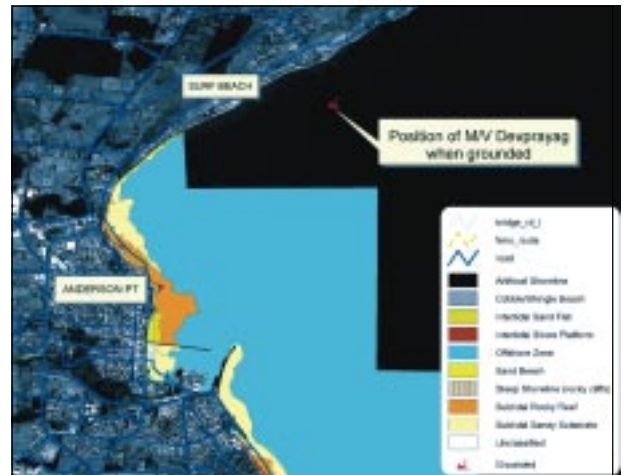
As part of the National Plan OSRA program, Management Guidelines and an OSRA policy were developed and endorsed by NPOG. These documents include the financial and administrative arrangements for States/NT for the supply of data and the requirement for a three year plan on the acquisition of new data and maintenance of existing data.

National datasets have been purchased for OSRA, which includes the AUSLIG gazetteer and the Australian Maritime Boundaries Information System (AMBIS). These datasets have been provided to the States/NT as part of on-going development of the OSRA program.



Example of National datasets

Since the completion of the OSRA project in December 1999, with funds provided by the Natural Heritage Trust, the OSRA has been used in various incidents and exercises. The following is a snapshot of the OSRA data used during the grounding of the *Devprayag* near Portland on 22 April 2001.



OSRA data used during *Devprayag* incident

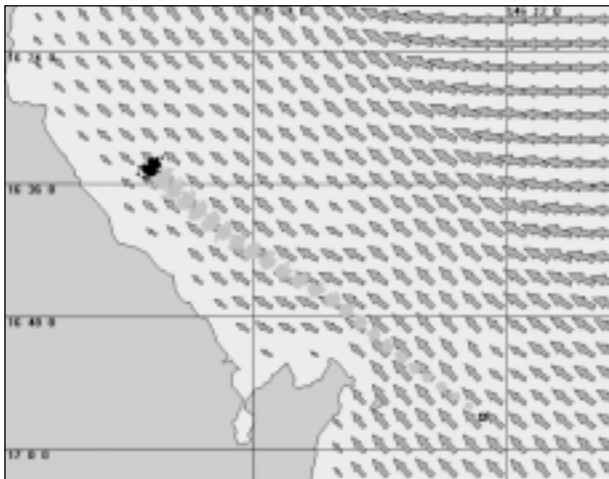
The development of the OSRA tools includes a theme manager, spill manager, time and distance to feature, event history and the ability to enter incident information. Once the OSRA tools have been completed and distributed to the States/NT, a training program will be developed for OSRA operators. It is envisaged that the first training session will be held in November 2001.

## OIL SPILL TRAJECTORY MODELLING

In near-shore marine environments, the tracking of oil spills, likely to impact the shoreline is of prime importance in the effective deployment of oil spill response personnel and equipment to protect environmentally sensitive areas and response planning.

Since the acquisition of the new Oil Spill Trajectory Modelling (OSTM) System, AMSA has provided to State/NT oil spill response personnel various trajectories for incidents and exercises. The following is a trajectory for the potential release of oil during the grounding of the *Bunga Teratai Satu* off Cairns on 2 November 2000.

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*Trajectory model used during Bunga Teratai Satu grounding*

Further development of the OSTM, in conjunction with AusSAR's Net Water Movement Project, continued throughout the year. This included the acquisition of enhanced bathymetry data and the inclusion of live wind data from the Bureau of Meteorology and ocean current data from the CSIRO. Completion of live feeds is expected by late 2001.

## **NATIONAL PLAN RESEARCH, DEVELOPMENT AND TECHNOLOGY PROJECTS**

The Research, Development and Technology (RD&T) project to review scientific literature on Properties of Naturally Degrading Sorbents for Potential Use in the Cleanup of Oil Spills in Sensitive and Remote Coastal Habitats was completed during early 2001. The report highlighted the lack of information available for these types of products.

A total of 41 different products of natural oil sorbents were tested. Thirty-three were plant-based sorbents with the remainder being of animal products. One wool sorbent had the greatest initial oil pick-up and maximal oil pick-up of any sorbent considered.

A full copy of the report is available from AMSA by contacting [eps@amsa.gov.au](mailto:eps@amsa.gov.au)

## **ENVIRONMENTAL AND SCIENTIFIC COORDINATORS WORKSHOP**

The National Plan, with assistance from Environment Australia, funded the 10th Environmental and Scientific Coordinators (ESC) Workshop in Queenscliff, Victoria in February 2001.

ESCs from all States and Territories attended the workshop as well as representatives from the oil and shipping industries.

Topics covered at the Workshop included:

- State/NT/industry reports of incidents and exercises;
- ESC Induction Package
- Reorganisation of the National Plan management structure;
- Chemical pollution response update;
- Outcomes of the Literature Review on the RD&T Project - Properties of Naturally Degrading Sorbents for Potential Use in the Clean up of Oil Spills in Sensitive and Remote Coastal Habitats;
- Management of shoreline & clean up data;
- Procedures for monitoring dispersant operations;
- Fluorometry training; and
- OSRA/OSTM scenarios.

The proceedings from the Workshop can be found on the AMSA web site at <http://www.amsa.gov.au/me/natplan/TOOLBOX/ESCWSP.htm>