Crisis Management System for New Zealand

CLIENT:

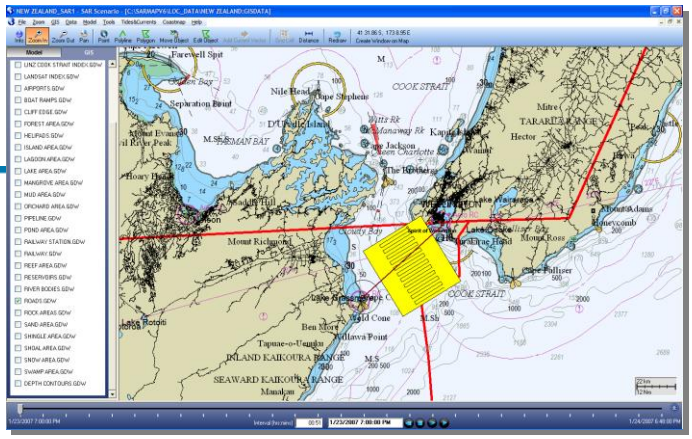
Maritime New Zealand

PROJECT #:

2006-100

PROJECT ELEMENTS:

- Search & Rescue planning system (SARMAP)
- Oil Spill prediction model system (OILMAP)
- Environmental Data Server (EDS)
- WebEOC Web-based information management
- ArcGIS framework



PROBLEM. PURPOSE.

Maritime New Zealand, the national agency responsible for marine safety, security and environmental protection needed to implement an Incident Management System that would improve communication, resource allocation, narrative recording and overall handling of marine incidents. The key requirement for the Incident Management System is to provide Maritime New Zealand's Rescue Coordination Centre (RCCNZ), Marine Pollution Response Services (MPRS), and Directors Advisory Team with functionality to improve current handling of incidents and to provide a 'common operating picture' between these groups.

SCIENCE. SERVICES. SOLUTIONS.

ASA provided a customized solution that integrates the latest numerical modeling and GIS technology to predict the movement of drifting oil and missing objects at sea. The models integrate global and regional oceanographic and meteorological forecast data to provide accurate drift predictions to assist responders plan for pollution and search & rescue response.

Custom tools allow the MNZ responders to access a database of response assets and plan responses to maritime events. GIS data from local providers was integrated into the system so access to environmentally sensitive areas, key coastal infrastructure, and coastal topography is seamless within the modeling system.

In addition, local hydrodynamic modeling was performed so users have access to high resolution tidal forecasts in coastal areas.

PRODUCTS. RESULTS.

ASA delivered OILMAP and SARMAP to New Zealand's response centers. The systems are integrated with WebEOC for web-based information management. OILMAP and SARMAP also include a data server to provide on-line weather and current forecasts. The project delivery included:

- Environmental Data Server Integration
- Data catalog of environmental data from public and private data providers
- Latest SAR technology and updates integrated into SARMAP system