

## West Atlas Oil Spill

### **Environment Information for the Australian Maritime Safety Authority for use in response planning**

**Provided by DEWHA, 25 August 2009**

#### **Sensitive Habitats in the Area**

- The source of the oil leak is located approximately 57 nautical miles from Cartier Island Marine Reserve and 80 nautical miles from Ashmore Reef National Nature Reserve. Other sensitive habitats in the region are Hibernia Reef and the Jabiru Shoals which are located outside the Australian Exclusive Economic Zone.
- The islands at Ashmore and Cartier reserves are exposed at high tide while areas of reef at Ashmore, Cartier and Hibernia are exposed at low tide. The Jabiru Shoals are at approximately nine metres depth and are therefore not exposed.

#### **Potential impacts on flora and fauna species**

##### Birds

- Ashmore and Cartier reserves are important staging points for migratory shorebirds and support large breeding populations of seabirds. Seabirds nest at the reserves throughout the year with some species currently nesting. Individuals from these species dive to shallow depths, foraging throughout the region. Flocks of migratory shorebirds gather at Ashmore and Cartier between October and November. Nesting occurs above the high tide mark.
- Seabirds are likely to be the most at risk of impacts from oil slicks, particularly diving species. Badly oiled birds usually die. Treatment requires specialist expertise and the right facilities—amateur attempts can further distress the birds and have limited success. Recovery of populations depends on young non-breeding adults from which breeding colonies can be replenished or a high reproductive rate. To date there is no evidence that oil spills have permanently damaged seabird populations, however species with very local distributions could be at risk in exceptional circumstances.

##### Marine Turtles

- Significant populations of three marine turtle species feed in the region year round. Ashmore provides critical nesting habitat for the Green turtles whose nesting activity occurs throughout the year peaking around January. Nests tend to be above the high tide mark.
- Little information is available on the effects of oil slicks on marine turtles. Turtles surfacing in an oil slick to breathe may suffer impacts to their eyes and damaged airways or lungs. Sea turtles may also be affected by oil through contamination of the food supply or by absorption through the skin. Marine turtles are particularly vulnerable at beach nesting sites during the breeding season.

##### Cetaceans

- Data on cetaceans in the area is poor however the area is not a migratory pathway for large cetaceans. Smaller cetaceans such as dolphins and pilot whales are expected to forage in the region throughout the year. The risk to cetaceans as a

result of the spill is considered to be low as their skin provides a barrier to the toxic substances in petroleum.

#### Fish

- Adult fish are not particularly sensitive to oil and fish kills after oil spills are rare, particularly in open waters. Adult fish tend to swim away from oil. There is no evidence so far that any oil spill has significantly affected adult fish populations in the open sea.

#### Other Species

- Seasnakes: Although Ashmore reserve has been recognised as a global hotspot for sea snakes the diversity and abundance of the species have steeply declined since 2000 with sightings now considered relatively rare.
- Plankton: Serious effects on plankton have not been observed in the open organisms sea. This is probably because high reproductive rates and immigration from outside the affected area counteract short-term reductions in numbers caused by the oil.

#### **Response Planning**

Customs will have crews of approximately 10 at Ashmore until mid September (expect the 19th) when the Ashmore Guardian returns which has a crew of 6. All the ACVs have minor oil spill response kits on board and the Guardian have the standard SOLAS kit designed to contain spills of up to 270,000 litres. They don't currently have shovels on board.