Preliminary oiled wildlife response evaluation – West Atlas Platform Spill – 31st August 2009

This report is to provide a basic summary of the findings of the wildlife aerial survey undertaken and give a succinct list of likely wildlife response options to consider for the West Atlas Platform incident.

Coast Watch aerial reconnaissance flight

Coast Watch aerial surveillance at the Cartier and Ashmore Marine Reserves on the 31st August 2009 identified roosting sea birds to these locations and birds feeding in the waters near the oil pollution. Because of the flight exclusion zone put around the leaking platform (for safety reasons) it was not possible to observe if birds were using the waters with surface oil contamination.

Terns or noddy type species with numbers in the 500-800 range and boobies in the tens were observed at Cartier island.

Roosting birds in the hundreds were observed at the Ashmore islands.

Noting that the time of day (middle) surveyed was not the optimal time to observe roosting birds (preferred times are always at dawn and dusk) and it was very difficult to see nesting birds from the Coast Watch flight due to speed and altitude limitations of the aircraft. The number of birds using these areas is therefore likely to be much greater than that observed.

Although observations were difficult it did not appear that any major seabird breeding activity had started at the reserves. Previous surveys do report breeding numbers of up to 18,000 breeding pairs to this area. Fortunately it would seem that these mass congregations have not started for this coming breeding season.

A likely dead whale (to be confirmed by photographs) was also seen about 4 nautical miles west north west of the oil slick during the Coast Watch flight. Higher mortalities rates of cetaceans are commonly seen during oil spill events. The likelihood of demonstrating any association of this whale mortality to the spill event is considerably low.

Under the conditions provided by the surveillance flight it was not possible to survey for marine mammals or reptiles to the area. Documented reports do detail that these categories of animals are however highly represented and significant to this region. These categories have not been considered in this preliminary report.

During the flight the extent of the slick observed was much larger than earlier indications. AMSA have reported (31/8/9) that the spill is now 25 x 70 nautical miles in size. A spill of this magnitude covering 1750 square nautical miles is very significant.

Primary Action

To consider the next stage of actions it is recommended that an accurate survey of the wildlife contaminated by the spill using the islands in the Cartier and Ashmore Marine Reserves be obtained. This survey will require a specialised shore patrol to deliver this action. Personnel would need to have experience in identifying chemically contaminated wildlife as the spill material is not the typical black chemical associated with most oil spills and is therefore quite difficult to detect. The shore party operations would involve both day and night operations. Surveying and collection of oiled birds for most seabird species is more effective at night and safer for the wildlife. Specialised equipment including catch nets, headlamps and personal protective equipment would be required for this activity. This could be sourced from the AMSA oiled wildlife response kits and possibly the Queensland Parks and Wildlife oiled wildlife resources through negotiation. A minimum team of three could undertake this work over a 3 day period (on site). Vessel support and transport to the reserves and then between the islands (including night operations) would be necessary to facilitate this operation. Detailed listings of specific equipment will be compiled upon approval of this action.

As a part of this investigation action there are then three subsequent options:

1. Record sightings only

This involves data recording wildlife that have been oiled and doing nothing else.

Most states have formal and legal obligations to respond to sick and injured wildlife.

In Queensland it is an offence not to respond to oiled wildlife under the Animal Protection Act 2000 except where there are circumstances that pose an unacceptable risk to personnel. Recently in NSW the RSPCA took the state environmental agency to court over a matter where due care was not taken in relation to wildlife matters. The Department of Environment, Water, Heritage and the Arts would be advised to seek advice on their legal obligations under such matters.

Given the nature of the contaminant and the knowledge from spills elsewhere it is likely that in most cases any contaminated birds from this spill would die as a result of either hypothermia, dehydration, starvation, infections or toxicity effects if no action was taken.

This first option is not recommended given the circumstances and obligations of a government agency.

2. Euthanasia for all oil impacted wildlife

Under this option all wildlife contaminated from the oil spill are collected, euthanized and then kept as evidence for any subsequent legal proceedings.

Euthanasia is a tool used in oiled wildlife response. It is however typically used where animals have minimal chances of survival, will most likely die anyway, or logistically it is not possible to respond effectively to these animals.

If this approach was taken the Department of Environment, Water, Heritage and the Arts would need to present a clear defence validating its actions as it could be exposed to considerable public and political scrutiny.

Although there would be logistical challenges in responding to oiled wildlife at the two reserves this would not form a suitable argument.

This option is therefore not recommended for this incident.

3. Provide primary care, triage and rehabilitate wildlife for release

This is the most complicated of the three options. All impacted wildlife would be collected provided some basic care on site, stabilised, triaged and those animals that have a high triage priority then transported back to a rehabilitation facility on the mainland where they are cared for until release.

In terms of the type of primary care that the animals would receive this would include basic temperature control, hydration, meeting nutritional requirements and dealing with any secondary issues such as infections or physical injuries in the field. These actions are very simply undertaken and the resources available in the AMSA oiled wildlife response kits can largely support these needs.

The type of oil spilling into the sea is of a type that can cause chemical burns to the skin of birds and damage the structure of the feathers. Any oiled birds collected will therefore need to receive a “quick wash” approach to remove the worst of the contamination and stop any further skin and feather damage. This would involve about 80 litres of warm (39-41 C) soapy water per bird. This would subsequently require storage of contaminated water to be later transported to the mainland. Waste water could be simply stored in IBCs kept on board the support vessel. The birds would still require complete washing and rehabilitation later at a mainland facility. The logistical issues for providing this quick wash approach would depend on the support vessel provided and would most likely require some small scale equipment to be purchased. The AMSA kits would be able to provide some of the necessary equipment.

Support operations to facilitate the stabilisation and triage process would involve AMSA kits, the AMOSC kit, some limited equipment from Queensland Parks and Wildlife (with negotiation); and additional equipment to be purchased including headlamps, weighing scales; box flooring material and larger holding boxes. A detailed listing of equipment can be developed if this is a likely option.

After a triage assessment it may be decided to euthanize some of the oil contaminated wildlife based on a system of specialised protocols. The protocols simply determine what animals have a very low chance of

survival and where response efforts are best placed. Under this circumstance oiled wildlife will then be secured as evidence for any legal proceedings.

For those animals that are classified as continuing through the process they will need to be transported back to the mainland and cared for in an appropriate care facility. This would involve transport systems using helicopter or sea plane transfers to minimise the loss of animals during the transport phase.

A response centre on the mainland would then need to be established and made operational as a part of the process to allow for complete washing and rehabilitation through to the animals release. Full details of a response centre to support captured and prioritised wildlife will be necessary and this can be investigated later if this option is likely to be pursued.

Although the third option is complicated it is the most common approach that is used in oiled wildlife responses world wide. Industry also accepts that oiled wildlife response operations like this are a standard approach and practice for oil spills.

This third option is the only one recommended.

Ongoing surveys

Whilst there is still oil on the sea surface then the threat to wildlife will continue. It will therefore be necessary to maintain a regular inspection of the islands within the marine reserves for some time as it is expected that the oil will continue to leak for some weeks. The survival of wildlife impacted by oil contamination is dependent on the time between oiling and response and not the amount of oiling. It is therefore essential that under the current climatic conditions that the sites are visited every few days to check for oiled wildlife.

Hazing

In dealing with the ongoing threat of oiling to wildlife (especially birds) as the oil remains on the surface it would be appropriate to investigate hazing options. Hazing is a method to keep the animals away from the oil contamination. Devices which emit a range of different high volume sounds can be deployed on the water in an attempt to keep birds away. These are relatively expensive costing about $US10, 000 per unit (some models covering 150 hectares each) and do not provide a guaranteed result. Under the spill circumstances this would be worth investigating further however.

Once it has been decided what likely actions should be pursued then I can provide further support in planning to deliver these outcomes as well as providing on ground support as required.

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