

MEMORANDUM

TO: Dennis Saito
Tesoro Hawaii Corp.

DATE: October 16, 1998

FROM: Joan Duffield *J/Duffield*
ENTRIX, Inc.

SUBJECT: *Survey Results of Seabird Sanctuaries on Oahu*

Under the direction of the U.S. Fish and Wildlife and the Hawaii Division of Forestry and Wildlife, a number of the Oahu seabird sanctuaries on the offshore islands were surveyed. The purpose of these surveys was to assess the possible extent of oil on seabirds and along the coastline as a result of the Tesoro Hose Spill. These surveys were conducted on October 9 and 12, 1998.

The Moku Manu Seabird Sanctuary was accessed by helicopter on October 9th. The survey team consisted of Joan Duffield (ENTRIX), Dave Woodside (U.S. Fish and Wildlife Service), Dave Smith and Sharon Reilly (State of Hawaii, Department of Land and Natural Resources), and Chris Jansen and Dave Hoffman (Tesoro). The extent of oiling on red-footed, brown and masked boobies was assessed by Joan Duffield and Sharon Reilly, Dave Smith conducted a survey on the number of wedge-tailed shearwater chicks, and Dave Woodside walked the shoreline to determine if there was any evidence of oil along the coastline.

Approximately 60 red-footed boobies, 6 brown boobies and 10 masked boobies were examined for evidence of oiling on their plumage. The masked boobies consisted of five pairs observed at the nest site, of which there were four chicks, one per nest, and one nest with an egg. Additionally, an immature sooty tern and brown noddy were also observed. None of the observed birds had any sign of oil. Although there were thousands of great frigatebirds roosting and flying over the island, their dark plumage and active flight patterns prevented any assessment of oil. A dead wedge-tailed shearwater with no evidence of oiling was collected for a necropsy. This bird was turned over to the Clean Islands Council by Chris Jansen.

Dave Smith recorded over 200 wedge-tailed shearwater chicks, most of which were approximately three months old. None of these chicks or their burrows had any evidence of oil.

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Dave Woodside found no oil or tar balls during the shoreline assessment along Moku Manu.

On October 12th, five more seabird sanctuaries were surveyed by Dave Smith and Joan Duffield. The islands surveyed included Manana, Kaohikaipu, Moku Lua (2) and Popoia Islands. Each island was accessed by boat. At the time of the survey, the only seabirds inhabiting these islands were wedge-tailed shearwater chicks. Thus, the focus of the surveys was to assess the presence or absence of oil along the shoreline of the islands.

The southern shorelines of Manana, Kaohikaipu, Moku Lua (2) Islands and the entire shoreline of Popoia Island were walked. None of the areas surveyed had any evidence of oil or tar balls, and no oiled carcasses were found. Based on these negative results, Dave Smith decided that the need to assess other islands such as Mokolii, Kapapa and Mokuauia was not warranted. Dave indicated that he would pass this information on to Beth Flint at the U.S. Fish and Wildlife Service.