

As illustrated in Table 1, the loggerhead turtle interaction rate is higher during June, July, and August (0.09 entanglements per set) than during January and August 15 through 31 (0.02 entanglements per set). However, the expected fishing effort, based on the average fishing effort from 1999–2001, is much lower in June, July, and August (76 sets) than during January and August 15 through 31 (252 sets). NMFS estimates that an average of 7 turtles would be taken during June, July, and August during El Nino conditions. By comparison, NMFS estimates that an average of 6 turtles would be taken during January and August 15 through 31. Thus, because of the higher entanglement rate during the June/July/August period, NMFS expects that a closure during this period will provide more protection to loggerhead turtles than a closure during January and August 15–31.

NMFS conducted an analysis to ensure that the June, July, and August closure period would avoid jeopardy for loggerhead turtles. The Incidental Take Statement in the 2000 BO stated that an observed take of 1 loggerhead turtle per El Nino year, extrapolated to an estimated mortality of 2 loggerhead turtles per El Nino year, would avoid jeopardy. NMFS' analysis of the June, July, and August closure period indicated that 6 loggerhead sea turtles would be captured per El Nino year outside of the closure period (e.g., September through May). Assuming that 32 percent of the captured loggerhead turtles would be killed (based on the survival rate of hard-shelled turtles caught by the CA/OR drift gillnet fleet from 1990–2000), NMFS estimated that 2 loggerhead turtles would be killed per El Nino year from September through May. Therefore the incidental mortality of loggerhead turtles that would be expected to occur with implementation of the June, July, and August closure period is consistent with the Incidental Take Statement and avoids jeopardy for loggerhead turtles.

As a result of this analysis, NMFS has concluded that implementation of the alternate closure in June, July, and August complies with the ESA because it provides at least the same level (and is expected to be greater) protection as the RPA identified in the BO.

Criteria for Determining El Nino Conditions

In order to determine whether El Nino conditions are present for the purposes of implementing this rule, NMFS is using the criteria outlined in the interim final rule (67 FR 78388, December 24, 2002). These criteria are outlined below.

For years in which an El Nino event has been declared by the NOAA Climate Prediction Center, NMFS uses the sea surface temperature anomaly charts available on the NOAA Coastwatch West Coast Regional Node web page at <http://coastwatch.pfel.noaa.gov/> and observer data on loggerhead turtle entanglements to determine whether El Nino conditions are present along southern California for the purpose of implementing the time and area closure identified in the October 2000 BO. NMFS uses the monthly sea surface temperature anomaly charts to determine whether there are warmer than normal sea surface temperatures present off of southern California during the months prior to the closure month for years in which an El Nino event has been declared by the NOAA Climate Prediction Center. "Normal sea surface temperatures" is the average of the monthly mean sea surface temperatures for 1950–97.

All loggerhead turtles observed entangled in the CA/OR drift gillnet fishery during El Nino events were entangled during months in which the sea surface temperatures ranged from approximately 60°F to 72°F (15.6°C to 22.2°C) and sea surface temperatures differed from the average by approximately 0°F to +4°F (0°C to +2.2°C). The sea surface temperature during the month preceding each observed loggerhead entanglement was either greater than normal or equal to the normal sea surface temperature. The sea surface temperature during the third month and second month prior to each entanglement during an El Nino event was always greater than the normal sea surface temperature for that month. NMFS believes this is because warmer sea surface temperatures are necessary for loggerhead turtles to move into the area. There have been no observed entanglements in this fishery in which any one of the preceding 3 months were colder than normal.

Based on this information, the need to allow sufficient lead time to publish a notice in the **Federal Register** announcing El Nino conditions prior to the start date of the closure, and the fact that the sea surface temperature charts for a recently completed given month are not available until the following month, NMFS is using sea surface temperature data from the third and second months prior to the month of the closure for determining whether El Nino conditions are present off of southern California. Thus, for years in which an El Nino event has been declared by the NOAA Climate Prediction Center, NMFS will evaluate sea surface temperatures for March and April to

determine whether El Nino conditions in June will trigger a closure to conserve loggerhead turtles. Specifically, if an El Nino has been declared for equatorial waters and the sea surface temperatures off southern California during this 2-month time period are greater than normal, NMFS will publish a **Federal Register** notice with the determination that El Nino conditions are forecast off of southern California for the purpose of implementing the time and area closure to protect loggerhead turtles. If the sea surface temperatures are normal or below normal and the Assistant Administrator has previously published a **Federal Register** notice indicating that El Nino conditions are present off southern California, the Assistant Administrator will publish an additional **Federal Register** notice announcing that El Nino conditions are no longer present for purposes of implementing the closure.

Although the process for determining whether El Nino conditions are present for the purposes of implementing this rule was not set forth in the regulatory text of the interim final rule, it was outlined in the preamble to the interim final and comments were solicited on these criteria. NMFS has decided to make these criteria permanent by including them in the regulatory text of this final rule.

El Nino Determination for Summer 2003

NMFS has determined that El Nino conditions were neither forecasted nor present off southern California for purposes of implementing the time and area closure for June, July, and August 2003. This determination was based on the March, April, May, and June monthly sea surface temperature anomaly charts as well as actual sea surface temperatures. Based on the criteria outlined above, sea surface temperatures in both the third and second months prior to the closure would need to be warmer than normal in order to trigger the implementation of the closure. Sea surface temperature anomaly charts for March, May, and June 2003 show ocean waters off southern California to be normal to 0.9°F (0.5°C) cooler than normal. Thus, the U.S. waters off southern California, east to 120°W remained open to drift gillnet fishing in June, July, and August 2003.

El Nino Determination for Winter 2004

NMFS has determined that El Nino conditions are neither forecasted nor present off southern California for purposes of implementing a January 2004, time and area closure pursuant to