

Questions for NMFS Office of Protected Species Regarding the Proposal to Change the Listing Status of Loggerhead Sea Turtles and Create Nine Distinct Population Segments

Note: Please provide a response to these questions by February 15, 2011. If some questions will take more time to answer, please send a reply to those that can be answered in this timeframe, and provide an estimate of when the answers to others will follow.

1. For each proposed distinct population segment (DPS), please provide a total population estimate derived from the proportion of nesting females to the total population.
2. If the annual survival rate, inclusive of the effects of anthropogenic mortality, of juveniles (after the first year) and that of adults is 0.85, and if the age of first reproduction is 30 years, does it follow mathematically that a population of 50,000 adult (*i.e.*, nesting) females implies a total female abundance (excluding young of the year) of approximately 3.3 million?
3. An expert serving on a NMFS scientific sea turtle committee has evaluated nesting beach data for the North Pacific loggerhead population through the fall of 2010 and expressly concluded that (i) “[n]esting beach abundance data for the North Pacific loggerhead population exhibits a long-term increasing trend” and (ii) “the North Pacific population of loggerhead sea turtles is neither small, nor is it declining.” Does NMFS dispute these conclusions? If so, please identify the specific data or information that contradicts these conclusions.
4.
 - A. Has NMFS conducted, sponsored, commissioned, or otherwise supported any in-water abundance surveys regarding the Northwest Atlantic loggerhead turtle population? For each study identified in the preceding sentence, please provide (a) a detailed description of the methodology used to conduct the study, (b) the date(s) of the study, (c) whether the study was peer reviewed, (d) the results of the study, and (e) whether the study was used by the BRT and, if not, why not.
 - B. Does NMFS plan to conduct, sponsor, commission, or otherwise support any additional in-water surveys of loggerhead turtle abundance in the proposed Northwest Atlantic DPS? If so, please (a) describe the date on which the study or studies will be completed, and (b) the methodology that will be, or is expected to be, used.
 - C. Is NMFS aware of any other in-water abundance survey of loggerhead turtles in the proposed Northwest Atlantic DPS done by another federal agency or a non-federal entity or person? If so, for each survey, please provide the information requested in (a)-(e) of Question 4A above.
 - D. Is NMFS aware of any in-water abundance survey for loggerhead turtles done by any person or entity with respect to any other proposed DPS? If so, please provide the information requested in (a)-(e) of Question 4A above.
5. Please provide the number of nests by state and “recovery unit” for each year 2000-2010. Please indicate if the current year’s data is preliminary and the source of the data.
6. It has only been over the past three decades that measures, such as turtle excluder devices in shrimp trawls and circle hooks for longline vessels, have been mandated to reduce the impact of commercial fisheries on sea turtles. Only over the past ten to fifteen years have such measures

been in widespread use, and significant improvements been made. At the same time, particularly since the Sustainable Fisheries Act of 1996 and the Reauthorization Act of 2006, fishing effort has been reduced to meet the law's conservation objectives. The 2009 Status Review and Loggerhead Sea Turtle Recovery Plan both explain the risks caused by fishing activities at great length, but do not characterize the trend in threats to loggerhead turtles over time.

A. Given that females do not mature until about 31 years of age, how long does NMFS estimate it will take for the reduction in loggerhead mortality and increased chances of survival resulting from these measures to be reflected in beach nest indices?

B. To quantify the trends in risks, please provide the following information for each of the years 1980 to 2010 (or the earliest year available):

- The number of active shrimp vessels operating in the South Atlantic and Gulf of Mexico regions each year and number of annual trips.
- The number of active pelagic longline vessels for species now under the highly migratory plan each year and the number of hooks fished annually.
- The annual total days-at-sea fished (*i.e.*, both open and access area days) by active dredge vessels in the Atlantic sea scallop fishery.
- The annual number of active South Atlantic and Gulf of Mexico snapper-grouper vessels.
- The number of gillnets employed in federal and state waters annually in the South Atlantic and Gulf of Mexico.

Also, please provide the following information:

- The date that turtle excluder devices were first mandated for shrimp vessels, and every significant expansion or refinement in required use, along with an estimate of the reduction in lethal takes projected and/or achieved for each new requirement.
- The same information for the use of circle hooks in the Atlantic and Pacific pelagic longline fisheries, as well as any other requirement designed to reduce lethal takes of loggerhead sea turtles (*e.g.*, time/area closures, bait, etc.) for any type of longline vessel.
- The same for the required use of chain mats in the Atlantic sea scallop fishery.
- The same for state and federal measures for gillnet and poundnet fisheries.
- For all fisheries operating under Endangered Species Act Section 7 biological opinions and incidental take statements, please provide the year and number of highest estimated lethal takes and the most current estimate of lethal takes.

7. NMFS and FWS propose to divide the global population of loggerhead turtles into nine "distinct population segments." If this proposal is adopted, each DPS will be a separate "species" for purposes of Section 7 of the Endangered Species Act.

A. In the last 10 years, how many consultations have been undertaken pursuant to section 7 of the Endangered Species Act regarding the impact of a proposed activity on loggerhead turtles? Please identify each such consultation.

B. For each such consultation, what was the time, manpower, and cost associated with completing the consultation?

C. What is the average time, manpower, and cost associated with completing a Section 7 consultation under the Endangered Species Act?

D. If the proposal to create nine loggerhead DPSs is adopted, which of the consultations identified in (A) above would have to be redone?

E. If the proposal to create nine loggerhead DPSs is adopted, what additional agency actions now occurring or reasonably foreseeable would be subject to Section 7 consultation under the Endangered Species Act?

8. Could the methodology used in the Proposed Rule also be employed to seek the designation of new DPSs by nesting beach, recovery unit, or other smaller unit?

9. The National Academy of Sciences analysis of the 2009 Status Review's use of scientific information stated, "Inadequate information is available for population assessments because the data have not been collected, or if they have been collected, they have not been analyzed or made accessible in a manner that allows them to be useful." Given this conclusion, provide a list of data that have been collected and not analyzed.

10. The Services also did not use 2008 nesting data for the proposed North Pacific DPS. Is the data from 2008 through the present available? If so, please provide it.

11. For the Indian Ocean basin, 2000 was the last year of data used to assess the status of the loggerhead populations. Is the data from 2001 through the present available? If so, please provide it.

12. To estimate anthropogenic mortality in the Services' model, panels of experts selected by the Services were asked to rate each source of mortality as high, medium, low, or very low. Each category was then assigned a mortality rate that was used in the model. Please list (a) experts consulted with respect to each DPS; (b) each experts' area of expertise; (c) provide copies of the standards the experts were provided to ensure uniformity in mortality rates assigned to each threat level (high, medium, low, or very low); and (d) provide copies of the guidelines or guidance provided for translating qualitative estimates of threats into quantitative rates, including the methodology used.

13. The number of anthropogenic mortalities developed by assigning actual mortality numbers to the high, medium, low, or very low threat is between 8 and 31 times higher than the number of actual mortalities detailed in the BRT Report. For the proposed western North Atlantic DPS, please provide a comparison of the anthropogenic mortality rates resulting from the threats matrix analysis with estimated rates derived from other empirical sources referenced in the report. Where possible, please show total mortality rates and the rates by particular threat.