CALIFORNIA OCEAN PROTECTION COUNCIL

Mike Chrisman, Secretary for Resources, Council Chair
John Chiang, State Controller, State Lands Commission Chair
Linda Adams, Secretary for Environmental Protection
Susan Golding, Public Member
Geraldine Knatz, Public Member
Darrell Steinberg, State Senator
Pedro Nava, State Assemblymember

MEMORANDUM

TO: Ocean Protection Council

FROM: Christina Cairns, Project Manager

DATE: November 20 – 21, 2008

RE: Sea Turtle Protection and Longline Fishing Exempted Fishing Permit

ATTACHMENTS: 1- Resolution on a Longline Exempted Fishing Permit and Potential Impacts to West Coast Sea Turtles (amended)

REQUESTED ACTION:

Staff recommends the Ocean Protection Council (OPC) adopt the attached Resolution to protect endangered and threatened sea turtles by opposing a proposed exempted fishing permit (EFP) under consideration by NOAA Fisheries Service for a longline swordfish fishery within the West Coast EEZ.

PROPOSED RESOLUTION:

The OPC Resolution on the longline exempted fishing permit describes the current knowledge on the endangered and threatened status of West Coast sea turtles and the impacts from fishing on these populations that could potentially lead to their extinction. The State of California maintains fisheries policies that protect Pacific leatherbacks and North Pacific loggerheads from longline and drift gillnet fishing; the Department of Fish and Game has consistently voted against the EFP as California's representative to the Pacific Fishery Management Council. The Resolution urges NOAA Fisheries and the Secretary of Commerce to deny the proposed exempted fishing permit based upon the critical need for protection of these sea turtles.

BACKGROUND:

Sea turtles are frequent visitors to the ocean waters off California. The area offshore central California in particular provides critical foraging area and a migratory corridor for Pacific leatherback and North Pacific loggerhead sea turtles, species that have existed since the time of the dinosaurs. Each fall between August and December, leatherback sea turtles arrive to feed on jellyfish, which constitute a major staple of their diet; for many, this culminates a 7,000-mile journey across the Pacific Ocean from nesting sites in Indonesia. Surveys by the National Oceanic and Atmospheric Administration (NOAA) have revealed that the number of Pacific

leatherback sea turtles returning to California each year is dwindling, and in 2006 no leatherbacks were observed, although a number of sightings were recently reported for 2008.[1]

Indeed, both Pacific leatherback and North Pacific loggerhead sea turtle species have suffered a significant decline (95% and 80-86%, respectively) over the past 20 years, in large part due to entanglement with fishing gear, [2] such as longlines and drift gillnets,[3] as well as degradation of their nesting sites and ingestion of marine debris. One study predicts that the death of more than 1% of adult female Pacific leatherbacks each year could lead to extinction of the population,[4] and another concludes that this mortality threshold is already being exceeded and estimates that leatherbacks could be extinct within the next 10-30 years if current fishing practices continue.[5] Because of these major declines, Pacific leatherback sea turtles are listed as endangered under the federal Endangered Species Act and are also classified as critically endangered by the International Union for Conservation of Nature (IUCN).[6] In addition, in 2007, the NOAA Fisheries Service found merit in a formal petition asking that California's waters be designated as critical habitat for the endangered Pacific leatherback under the Endangered Species Act, and a study to make a final determination is currently under way. NOAA scientists have predicted that current population trends indicate a high probability that North Pacific loggerheads will become "quasi-extinct" (defined as 50 or fewer adult females) within approximately 50 years.[7] North Pacific loggerhead sea turtles are listed as threatened under the Endangered Species Act with their status currently under review for uplisting to endangered.

The NOAA Fisheries Service monitors marine species within the U.S. West Coast exclusive economic zone (EEZ) that may be impacted by U.S. fisheries. To date, NOAA has issued eight Biological Opinions under the Endangered Species Act on Hawaiian longline interactions with sea turtles. A 2001 opinion resulted in closure of the Hawaiian longline swordfish fishery due to the high level of adverse impacts on sea turtles, although NOAA Fisheries recently re-opened a more limited fishery after implementing bycatch reduction measures and a cap on sea turtle bycatch.

---

[1] Perlman, D. "Sea Turtles are back, noshing on jellyfish." *San Francisco Chronicle*, September 29, 2008. Available at: http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2008/09/29/BAI31353SK.DTL&hw=leatherbacks&sn=001&sc=1000.

[2] Lewison, R, S. Freeman and L. Crowder. 2004. "Quantifying the effects of fisheries on threatened species: the impact of pelagic longlines on loggerhead and leatherback sea turtles." *Ecology Letters*, 7:221-231. The study estimates that longline fisherman catch as many as 50-60% of the remaining leatherback population each year.

[3] Pelagic longline fishing employs a monofilament main line that is suspended in the water column and held up with floats. The line can measure over 100 kilometers long with several thousand baited hooks attached to leaders spaced in between, and is usually deployed for about 12 hours. In contrast, drift gillnet fishing works by deploying curtain-like mesh nets that hang down from the ocean surface by a float line (corkline) and have a weighted line (leadline) on the bottom. Drift gillnets targeting large pelagic fish such as swordfish are commonly several kilometers long, and range from 20 to 30 meters in height. The mesh is designed to be just large enough to allow the selected fish to become entangled at their gills. Drift gillnet gear is normally set at dusk and hauled in at dawn. The proposed EFP would use shallow-set longlining gear with a 100-km long main line containing up to 1200 hooks evenly spaced and set at approximately 40 meters deep. Modern "circle" hooks and mackerel bait would be used to decrease mortality in hooked bycatch, mainly sea turtles.

[4] Spotila, J. et al. 2000. "Pacific Leatherback Turtles Face Extinction." *Nature*, 405:529-530.

[5] Lewison et al.

[6] International Union for Conservation of Nature. 2008. IUCN Red List of Threatened Species, Dermochelys coriacea. Available at: http://www.iucnredlist.org/search/details.php/6494/summ.

[7] NOAA Fisheries Service, Endangered Species Act Section 7 Consultation, Biological Opinion and Incidental Take Statement on the Hawai'i-based pelagic, deep-set longline fishery, Honolulu, HI: NMFS Pacific Island Region. October 4, 2005.

NOAA's Pending Decision

The NOAA Fisheries Service is currently considering an application for an exempted fishing permit (EFP) to allow a single West Coast-based vessel to test a shallow-set longline swordfish fishery off the California coast within the West Coast EEZ, despite the long-standing prohibition on commercial drift longline fishing in state waters and the EEZ.[8] The purpose of the EFP is to assist NOAA Fisheries in determining whether longline fishing, subject to gear restrictions and continuous monitoring, presents an economically and environmentally superior alternative to drift gillnet fishing within the West Coast EEZ. A nearly-identical application for longlining in the EEZ was proposed in 2007.

The Department of Fish and Game (DFG) opposed the EFP for the 2007 and 2008 fishing seasons on grounds that the proposal would not contribute to the current knowledge on bycatch reduction and could adversely affect sea turtles and state fisheries, and therefore would be contrary to its charge to conserve, protect and manage California's marine resources.[9] Accordingly, in its role as the state representative to the Pacific Fishery Management Council (PFMC), DFG voted against the EFP, yet the council approved the EFP by a majority vote both years.

In 2007, the EFP was not put into effect because the California Coastal Commission denied certification of the permit application due to its inconsistency with California's federally-approved Coastal Management Program. The Coastal Commission has applied for permission to review the 2008 EFP application under the federal Coastal Zone Management Act, but a final decision regarding Coastal Commission review is still pending by NOAA's Office of Coastal Resource Management.

Impacts of Longline Fishing

Longline fishing creates significant amounts of bycatch, not only of endangered sea turtles but marine mammals, seabirds, and non-commercially harvested fish species. Experiments to test special longline hooks and gear to prevent bycatch of non-target species are in development but not yet proven to consistently reduce capture rates.[10] Drift gillnets are another type of fishing gear that is currently used throughout the West Coast EEZ and have demonstrated even higher rates of bycatch and bycatch mortality than longline gear due to their large surface area.[11] Bycatch from drift gillnetting has been reduced in California and Oregon waters through implementation of the Pacific Leatherback Conservation Area, an expanse of ocean closed to drift gillnet fishing gear between August 15 and November 15 (when sea turtles come to forage)

---

[8] In 1989, with the enactment of Section 9028 of the Fish and Game Code, the California Legislature prohibited pelagic drift longline fishing off the California coast by banning the use of hook and line gear (other than set gear) that measures longer than 900 feet. In 2004, the Pacific Fishery Management Council took over management of the Pacific swordfish fishery within the West Coast EEZ of the United States and promulgated regulations for the fishery under the Fishery Management Plan (FMP) for Highly Migratory Species (HMS). The HMS FMP currently prohibits West Coast longline fishermen from fishing in the EEZ and shallow-set longline fishing on the high seas (unless they have a Hawaii longline limited entry permit and set certificates).

[9] Letter from Marija Vojkovich, Regional Manager, California Department of Fish and Game, and California PFMC representative, to Hon. Julia Brownley, State Assemblymember. September 30, 2008.

[10] Read, A. 2007, "Do Circle Hooks Reduce the Mortality of Sea Turtles in Pelagic Longlines? A Review of Recent Experiments." *Biological Conservation,* 135:155-169.

[11] Lewison, R, L. Crowder. 2007. "Putting longline bycatch of sea turtles into perspective." *Conservation Biology,* 21:79-86.

that stretches from Point Sur, California, north to Salem, Oregon. The proposed EFP would allow drift longline fishing inside this conservation area during its seasonal closure.

As proponents of the EFP assert, shallow-set longlining may result in less mortality of bycatch and be less environmentally damaging overall than drift gillnet fishing, which indiscriminately traps marine species over large areas. Further research to transition drift gillnet fishing to less damaging forms of fishing is warranted, particularly for fisheries with high rates of bycatch for multiple species. However, the issue at hand is whether the proposed EFP activity will further this effort and whether it should occur in the proposed location. Given that the proposed project would use existing gear types and fishing techniques that are already practiced in other areas of the U.S. (including the Hawaiian swordfish fishery, as required by the WPFMC) and would not produce statistically viable results, no new information would be gained to further knowledge about how to successfully reduce current bycatch rates of Pacific sea turtles. In addition, adoption of this EFP would not result in a guaranteed reduction in fishing effort by the drift gillnet fishery currently practiced offshore California; it would merely allow another type of fishing practice to begin where it has traditionally been prohibited. As DFG concluded, the proposed EFP to examine a shallow-set drift longline fishery in federal waters that has been banned within adjacent state waters would be inconsistent with current state legislative policy and would pose additional threats to an already endangered species.

CONSISTENCY WITH CALIFORNIA OCEAN PROTECTION ACT:

The proposed action is consistent with the Ocean Protection Act (Division 26.5 of the Public Resources Code). Public Resources Code Section 35615(a)(1) specifically directs the Council to coordinate activities of state agencies to improve the effectiveness of state efforts to protect ocean resources, establish policies to coordinate the collection of scientific data related to the ocean, and recommend needed changes in state and federal law. The proposed action supports the efforts of state agencies, and the state legislature which recently passed Assembly Joint Resolution 62 that requests the National Marine Fisheries Service to delay consideration of, or deny, the swordfish longline EFP for a specified period of time.

The proposed OPC Resolution does not recommend a change in state law but rather recommends upholding existing policy to prohibit commercial drift longline fishing offshore California. It is also consistent with Public Resources Code Section 35615(a)(5), which directs the Council to transmit the results of research and investigations to state agencies to provide information for policy decisions.

The Ocean Protection Council staff consulted with various non-governmental organizations, members of the public and government agencies, including DFG, the California Coastal Commission, and the National Marine Sanctuary Program, in crafting this Resolution. The Resolution includes the most current knowledge available on Pacific leatherback and North Pacific loggerhead sea turtles to recommend appropriate action to protect these endangered and threatened species.

CONSISTENCY WITH OPC'S STRATEGIC PLAN GOALS & OBJECTIVES:

The project is consistent with the OPC's Five-Year Strategic Plan in the following respects:

- **Goal A (Governance), Objective 2**: "Maximize the effectiveness of state agency efforts to protect and conserve ocean and coastal resources.*"* The proposed action is designed to

bolster state efforts that would result in the protection of sea turtles and other unintended bycatch caught as a result of commercial fishing offshore California.

- **Goal A (Governance), Objective 5**: "Engage federal government support for California priorities.*"* This effort is intended to gain the support of federal government in recognizing the importance of sea turtles in the California marine ecosystem by allowing state agency review and engaging the NOAA Fisheries Service to ultimately deny the proposed commercial longline EFP.