## MULTI-CRITERIA DECISION TOOL TO EVALUATE PROPOSED CHANGES IN STELLER SEA LION PROTECTION MEASURES IN ALASKAN GROUNDFISH FISHERIES USING THE ANALYTIC HIERARCHY PROCESS<sup>1</sup>

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## ABSTRACT

Alaskan groundfish fisheries have been constrained to minimize impacts to the endangered Steller sea lion (SSL) since 1992. These management measures introduced inefficiencies and safety concerns for the fishing fleet. Recognizing the desire to optimize both the economic potential of fisheries in Alaska and the recovery of the endangered SSL, in 2006 the North Pacific Fishery Management Council (NPFMC) called for proposals to change the SSL protection measures. Following extensive review of scientific data and solicitation of public comment over a 16-month period, the SSL Mitigation Committee (SSLMC) developed a Proposal Ranking Tool (PRT) using the Analytic Hierarchy Process (AHP). The AHP enabled diverse individuals with various perspectives to use their expert knowledge in rating management measures relative to their expected impact to SSL. The PRT model output was used to select the best set of proposed management measures to move forward through the federal regulation process.

Keywords: fishery management, Steller sea lion, Analytic Hierarchy Process

<sup>&</sup>lt;sup>1</sup> Acknowledgements: The author facilitated initial development of the PRT and prepared a preliminary report in August 2006 from which much of the material in this paper is drawn (see <u>www.fakr.noaa.gov/npfmc/current\_issues/ssl/SSLMCranktool806.pdf</u>). Revisions to the PRT and updated reports can be found at <u>www.fakr.noaa.gov/sustainablefisheries/sslmc</u> and are primarily due to the efforts of Larry Cotter (chairman), Bill Wilson (NPFMC staff), Dan Hennen (Alaska Sealife Center), Kristin Mabry and Melanie Brown (NMFS), and Sue Hills (UAF). The PRT was developed from discussion by the SSLMC in consultation with staff from the NMFS-AFSC and other scientists.