

KRILL HARVEST BAN

At the November 2004 meeting, the Pacific Fishery Management Council (Council), will consider initiating development of a formal prohibition on directed fisheries for krill (and, potentially, other forage fish species) in Council-managed waters. This would be in recognition of the importance of krill as a fundamental food source for much of the marine life along the West Coast. Moreover, state laws prohibit krill landings by state-licensed fishing vessels into California, Oregon, and Washington, respectively. Thus, the action could provide for consistent federal and state management. There are currently no directed krill fisheries in Council-managed waters.

At the September meeting, National Marine Fisheries Service (NMFS) presented several options for developing and implementing measures to regulate directed fisheries for krill in Council-managed waters (Agenda Item H.4.b, NMFS Report). NMFS stated their preference would be to incorporate krill into the coastal pelagic species (CPS) fishery management plan (FMP). The Council requested staff work with NMFS Southwest Region and NOAA General Counsel to develop information about procedural mechanisms for prohibiting fishing for krill and other forage species within the West Coast U.S. Exclusive Economic Zone.

The Council requested the options paper developed by NMFS be provided to Council advisory bodies for review and comment. At the November meeting, NMFS will report on discussions about the feasibility of a CPS FMP mechanism and the Council will receive reports from advisory bodies. Based on this advice, and public comment, the Council is expected to determine a course of action for regulating or restricting directed krill fisheries in Council-managed waters.

Council Action:

Consider the Next Steps to Protect Krill.

Reference Materials:

1. Agenda Item H.4.b, NMFS Report: Options for Controlling Fishing for Krill.
2. Agenda Item H.4.c, CPSMT Report.
3. Agenda Item H.4.c, CPSAS Report.

Agenda Order:

- a. Agenda Item Overview
- b. NMFS Report
- c. Reports and Comments of Advisory Bodies
- d. Public Comment
- e. **Council Action:** Consider the Next Steps to Protect Krill

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OPTIONS FOR CONTROLLING FISHING FOR KRILL

This paper is intended to provide information to the Pacific Council as it considers whether, and if so how, to control or prohibit fishing for krill in the EEZ off the West Coast.

1. Rely on List of Fisheries and State prohibitions

The List of Fisheries published at 50 CFR 600.725(v) was established under § 305(a) of the Magnuson-Stevens Act. The list identifies all fisheries under the authority of each regional council and all fishing gear used in such fisheries. It provides a means to prohibit the entry of new gears into U.S. fisheries until a council has had an opportunity to evaluate whether the entry would be consistent with the council's management programs. A person may not fish for and/or retain species except as taken with gear authorized for the listed fisheries. A person may not use a gear or participate in a fishery not already on the list unless that person has notified the appropriate council at least 90 days in advance. A council may request the Secretary to promulgate emergency regulations to prohibit any person or vessels from using an unlisted fishing gear or engaging in an unlisted fishery if the council determines that such unlisted gear or unlisted fishery would compromise the effectiveness of conservation and management efforts under the Magnuson-Stevens Act. This would provide the council with time to consider and adopt appropriate controls through regular processes. The list does not now include fishing for krill off the West Coast with any gear as a listed fishery. However, the list does include an entry for "Commercial (non-FMP)" with trawl as an authorized gear. Thus, it may not be useful in controlling krill fishing. A person who wants to engage in fishing for krill could to claim that trawl fishing for krill is eligible under the list. However, to be better prepared in the event of challenge, the person might be better off to advise the Pacific Council at least 90 days in advance of such fishing. At that point, the Council could decide whether to request emergency action under the M-SA. It should be noted (as in other materials) that the West Coast States already prohibit landings of krill, so there will continue to be control of krill fishing by coastal-based fishers for the time being except if they were able to find other locations at which landings would be permitted.

2. Incorporate krill as a management unit species in the CPS FMP

The CPS FMP provides a potentially useful model for explicitly incorporating the role that krill may serve as forage in the framework for managing fisheries for krill. For example, the FMP provides that the spawning biomass for Pacific sardine must be at a certain level before any fishing is permitted, and then only allows a portion of the spawning biomass above that minimal threshold to be harvested. The FMP includes an objective or maintaining the biomass at levels that provide forage for other species. Conceptually, the same approach could be used with krill, with the distinction that, given the available information about krill and the nature and extent of dependence of other fish and non-fish species on krill, the available harvest would initially be zero. This would be a precautionary approach, recognizing the data poor situation and the risk that allowing directed harvest would have substantial adverse effects on other fish stocks and possibly other marine resources. Over time, through ecosystem research and monitoring, and possibly exempted fishing or cooperative research with industry, an information base could be developed that would demonstrate whether certain

harvest levels, or harvests in certain times or places, would be acceptable. The amended FMP could establish a process for making such determinations through the Council process. This approach would preclude persons in other fisheries (whether under FMPs or not) from engaging in krill fishing until a Council decision allowing krill fishing.

By explicitly setting a stage for “management” of krill fishing, this alternative might increase the visibility of krill and thus enhance the ability to obtain resources dedicated to krill research and monitoring. This FMP amendment approach would be relatively straightforward, though it also would take dedication of some Council resources. The extent of Council resources needed would vary depending on the timetable in which the Council would seek to complete action and the extent to which NMFS would be able to take on some of the documentation requirements. In the interim, the controls associated with States’ prohibitions and the List of Fisheries (and the prospect of emergency action) could provide protection during the FMP amendment preparation and implementation period.

3. Designate krill as forage under one or more FMPs

Under this alternative, one or more fishery management plans would be amended to designate krill as forage for managed species and then prohibit fishing for krill. This approach was used by the North Pacific Council, which amended its fishery management plans for Gulf of Alaska groundfish and Bering Sea groundfish to prohibit krill fishing. Development of the amendments (both were necessary because of the geographic limits of the separate FMPs) was relatively simple and quick; there were no substantial objections from any sectors and thus the process went very smoothly. Given that there was no interest in fishing for krill and generally strong support for ensuring the continued abundance of krill for groundfish forage (as well as forage for some cetaceans and other species), this approach was very effective in Alaska. It is noteworthy that the Magnuson-Stevens Act has a special provision that allows the State of Alaska to assert management jurisdiction over non-State vessels in the EEZ off Alaska, and thus Council action with respect to groundfish fishers could be reinforced by State controls over non-groundfish fishers. In the Pacific Council, however, no such authority exists, though as noted all States currently prohibit landings of krill. This approach might be most effective if a “generic” FMP amendment were developed to establish krill as forage in all Council FMPs for species for which krill is known to be forage. It is not known, however, if there would be pressure to include other forage species (the Alaska approach identified several species as forage). This alternative would largely be a Council workload, and the workload might not be great if the amendment were kept very simple. NMFS would be able to provide substantial background information about krill and its forage role for fish and other living marine resources. The controls through State prohibitions and the List of Fisheries (and the prospect of emergency action) still could provide protection in the interim.

4. Designate krill as a component of essential fish habitat in follow-up to analysis of this action as an alternative in the EFH EIS and/or other FMPs

This in some respects is the same as the “forage” amendment as essential fish habitat (EFH) for managed fish species can include food sources for those species. Krill are known forage for a large number of groundfish species off the West Coast (as well as other fish species), and therefore, the Council could amend its Groundfish FMP (and possibly other FMPs) to designate krill as a component of the EFH for groundfish. This could be initiated by including in the EFH EIS an

alternative in which krill is designated as an EFH component, with the harvest of krill to be prohibited. This could be followed by an FMP amendment to carry out this alternative. Because the EIS is driven by a court-mandated deadline, this step would be accomplished by May 2006. This approach would leave much of the preparation of background documentation in NMFS' hands as part of the EFH EIS process rather than taking Council staff resources. The ultimate FMP amendment(s), however, would be a Council responsibility. Because of the timetable for the EIS, however, this would likely not result in prompt action. The controls through State prohibitions and the List of Fisheries (and the prospect of emergency action) still could provide protection in the interim.

COASTAL PELAGIC SPECIES MANAGEMENT TEAM REPORT ON
KRILL HARVEST BAN PROPOSAL

The Coastal Pelagic Species Management Team (CPSMT) reviewed the list of options developed by National Marine Fisheries Service (NMFS) for controlling the harvest of krill. Given the lack of baseline scientific information on abundance and population dynamics of this species off the U.S. Pacific coast, the CPSMT feels that federal management measures to prevent development of directed krill fisheries would be prudent at this time. The CPSMT was informed that NMFS (Southwest Region, Long Beach) preferred the option to incorporate krill into the Coastal Pelagic Species Fishery Management Plan (CPS FMP). Although the CPSMT agrees that incorporation of krill into the CPS FMP would provide a means to regulate potential krill fisheries, such an action could be problematic and warrant further discussion before formal action is undertaken.

For example, the CPSMT expects to be occupied with development of the sardine allocation FMP amendment until June of 2005. Second, the CPSMT is uncertain about the mechanics of how krill would be included (i.e., categorized) in the CPS FMP, especially if overfishing and other National Standard 1 criteria would be required. Third, the CPSMT is unclear on how non-CPS fishing gears would be managed under the CPS FMP. For example, while the CPS FMP does not specify a legal gear for CPS fisheries (other than gear used to harvest anchovy for reduction), the FMP generally applies to purse seine and lampara gear, typically used to harvest mackerel, sardine, and squid. Information provided to the CPSMT suggests krill fisheries typically use small-mesh trawl gear. Thus, the CPSMT requests more information on how krill would be categorized and how non-purse seine fishing gears would be managed under the CPS FMP. Finally, the three West Coast states do not allow krill to be landed at ports within their jurisdiction. To be effective, federal management policies would need to be developed in accord with state management goals.

In summary, before revisions are made to the CPS FMP, the CPSMT strongly recommends additional information and discussion concerning these issues and uncertainties.

PFMC
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COASTAL PELAGIC SPECIES ADVISORY SUBPANEL REPORT ON
OPTIONS FOR CONTROLLING FISHING FOR KRILL

The Coastal Pelagic Species Advisory Subpanel (CPSAS) heard a summary of the options for controlling krill fishing by Mr. Svein Fougner, National Marine Fisheries Service (NMFS). The CPSAS agrees that krill is critically important to the ecosystem as forage fish for many species. In order to protect krill from the possibility of overharvest, the CPSAS agrees that the Pacific Fishery Management Council (Council) should explore management measures for regulating development of krill fisheries within the West Coast EEZ.

However, a complete ban on krill fishing may not be appropriate; more information is needed to assess the possibility of fisheries being allowed.

The CPSAS believes there could be some benefit to including krill within the CPS FMP, especially with regard to research opportunities on the complex of species including sardine. However, the CPSAS would recommend that krill be managed under a third category of management rather than as an "active" or "monitored" species. This third category would need to be created.

The CPSAS does not support any delay in the process of the current FMP amendment dealing with sardine allocation.

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