May 17, 2011

Mr. Mark Cedergreen, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, Oregon 97220-1384

RE: Support for Ecosystem Fishery Management Plan

Dear Mr. Cedergreen and PFMC members:

As a local elected official from a coastal county, I support the Pacific Fishery Management Council (PFMC) work to develop an Ecosystem Fishery Management Plan.

It has been long recognized that ecosystem considerations must be incorporated into fishery management in order to have long-term sustainable fisheries and a healthy ocean environment. For example, the 1999 “Ecosystem-based Fishery Management” report to Congress suggests this management approach is likely to contribute to increased abundance of those species that have been overfished, contribute to the stability of employment and economic activity in the fishing industry, and to the protection of marine biodiversity which fisheries and our coastal economies depend. In order to move forward with ecosystem-based fishery management, I support the development of an Ecosystem Fishery Management Plan with the goal of maintaining and protecting ecosystem health and fishery sustainability.

It is important that the PFMC formally integrate ecosystem considerations into the existing Fishery Management Plans (FMPs). It is equally important that the PFMC develop an umbrella Ecosystem FMP that can link ecological considerations across the four FMPs (salmon, groundfish, coastal pelagic species, and highly migratory species) and manage ecologically important species that fall outside of the current fishery management structure. Specifically, I support an Ecosystem FMP that would address forage species that are important prey for fish in the existing management plans, but are not currently managed by the PFMC. Forage fish are vital for marine ecosystems and leaving enough of them swimming in the ocean is one strategy that will pay off in the long run. Abundant populations of forage species are essential for sustainable fisheries and a healthy ocean. Recognizing this in the Ecosystem FMP by including forage species, implementing conservation and management measures as appropriate, and managing for a healthy forage base would be an important step forward.

Our oceans and coastal communities are facing many challenges. Too often we hear about ecological consequences after the fact because they are not considered in decision-making or directly monitored. While it may be difficult, it is vitally important to move forward with an ecosystem-based fishery management approach. Big strides can be made now by developing the Ecosystem FMP framework and including a focus on forage species.

Thank you for considering my input.

Sincerely,

Larry Phillips, Councilmember
Metropolitan King County Council, District Four
May 18, 2011

Mr. Mark Cedergreen, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, Oregon 97220-1384

RE: Ecosystem Based Management

Dear Mr. Cedergreen and PFMC members:

As a County Commissioner from a coastal county, I am writing in support of the Pacific Fishery Management Council (PFMC) work to develop an Ecosystem Fishery Management Plan.

It has been long recognized that in order to have long-term sustainable fisheries and a healthy ocean environment, ecosystem considerations must be incorporated into fishery management. For example, the 1999 report to Congress, “Ecosystem-based Fishery Management,” suggests this management approach is likely to contribute to increased abundance of those species that have been overfished, contribute to the stability of employment and economic activity in the fishing industry, and to the protection of marine biodiversity which fisheries and our coastal economies depend. In order to move forward with ecosystem-based fishery management, I support the development of an Ecosystem Fishery Management Plan with the goal of maintaining and protecting ecosystem health and fishery sustainability.

It is important that the PFMC formally integrate ecosystem considerations into the existing Fishery Management Plans (FMPs). It is equally important that the PFMC develop an umbrella Ecosystem FMP that can link ecological considerations across the four FMPs (salmon, groundfish, coastal pelagic species and highly migratory species) and manage ecologically important species that fall outside of the current fishery management structure. Specifically, I support an Ecosystem FMP that would address forage species that are important prey for fish in the existing management plans, but are not currently managed by the PFMC. Forage fish are vital for marine ecosystems and leaving enough of them swimming in the ocean is one strategy that will pay off in the long run. Abundant populations of forage species are essential for sustainable fisheries and a healthy ocean. Recognizing this in the Ecosystem FMP by including forage species, implementing conservation and management measures as appropriate, and managing for a healthy forage base would be an important step forward.

Our oceans and coastal communities are facing many challenges. Too often we hear about ecological consequences after the fact because they are not considered in decision-making or directly monitored. I don’t doubt that it will be difficult, but moving forward with an ecosystem-based fishery management approach is vitally important. Big strides can be made now by developing the Ecosystem FMP framework and including a focus on forage species.

Thank you for considering my input.

Sincerely,

[Signature]

Lane County Commissioner
May 17, 2011

Mr. Mark Cedergreen, Chair & Members
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, Oregon 97220-1384

RE: Support for Ecosystem Based Fisheries Management

Dear Mr. Cedergreen and PFMC members:

As a local elected official from a coastal county, I am writing in support of the Pacific Fishery Management Council (PFMC) work to develop an Ecosystem Based Fisheries Management Plan.

Residents of Coastal California are keenly interested in sound long-term management of ocean fisheries. The economic and recreational benefits of sustainable fisheries are very important considerations to the residents and business owners of Ventura County. State adoption of Marine Protected Areas has laid the groundwork for sound ecosystem based fisheries management, and these areas are already providing evidence of the benefits of broad ecosystem management.

It has been long recognized that in order to have long-term sustainable fisheries and a healthy ocean environment, ecosystem considerations must be incorporated into fishery management. It is important that the PFMC formally integrate ecosystem considerations into the existing Fishery Management Plans (FMPs). It is equally important that the PFMC develop an umbrella Ecosystem FMP that can link ecological considerations across the four FMPs (salmon, groundfish, coastal pelagic species and highly migratory species) and manage ecologically important species that fall outside of the current fishery management structure. Specifically, I support an Ecosystem FMP that would address forage species that are important prey for fish in the existing management plans, but are not currently managed by the PFMC. Abundant
populations of forage species are essential for sustainable fisheries and a healthy ocean. Recognizing this in the Ecosystem Based FMP by including forage species, implementing conservation and management measures as appropriate, and managing for a healthy forage base would be an important step forward.

Thank you for your work to date on Ecosystem Based management, and I respectfully encourage adoption and implementation of this scientifically sound approach to sustainable fisheries management.

Cordially,

Steve Bennett,
Supervisor, First District
May 23, 2011

Mr. Mark Cedergreen, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384

RE: Ecosystem Based Management

Dear Mr. Cedergreen and PFMC Members:

I am a County Commissioner from Wahkiakum County, Washington, a fishing community. I am writing in support of the Pacific Fishery Management Council (PFMC) work to develop an Ecosystem Fishery Management Plan.

In order to have a long-term sustainable fishery, and a healthy ocean environment, ecosystem considerations must be incorporated into fishery management. A 1999 report to Congress, suggested an “Ecosystem-based Fishery Management,” management approach is likely to contribute to increased abundance of those species that have been overfished, contribute to the stability of employment and economic activity in the fishing industry, and to the protection of marine biodiversity which fisheries and our coastal economies depend upon. In order to move forward with ecosystem-based fishery management, I support the development of an Ecosystem Fishery Management Plan with the goal of maintaining and protecting ecosystem health and fishery sustainability.

I feel it is important that the PFMC formally integrate ecosystem considerations into the existing Fishery Management Plans (FMPs). It is equally important that the PFMC develop an umbrella Ecosystem FMP that can link ecological considerations across the four FMPs (salmon, ground fish, coastal pelagic species and highly migratory species) and manage ecologically important species that fall outside of the current fishery management structure. Specifically, I support an Ecosystem FMP that would address forage species that are important prey for fish in the existing management plans, but are not currently managed by the PFMC. Forage fish are vital for marine ecosystems and leaving enough of them swimming in the ocean is one strategy that will pay off in the long run. Abundant populations of forage species are essential for sustainable fisheries and a health ocean. Recognizing this in the Ecosystem FMP by including forage species, implementing
conservation and management measures as appropriate, and manage for a healthy forage base would be an important step forward.

Our oceans and fishing communities are facing many challenges. Too often we hear about ecological consequences after the fact because they are not considered in decision-making or directly monitored. I don’t doubt that it will be difficult, but moving forward with an ecosystem-based fishery management approach is vitally important. Big strides can be made now by developing the Ecosystem FMP framework and including a focus on forage species.

Thank you for taking the time to consider my input.

Sincerely,

Daniel L. Cothren
Wahkiakum County Commissioner
District No. 2
May 5, 2011
WD bc/ps/11036/T

Mark Cedegreen, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384

RE: Ecosystem Based Management

Dear Mr. Cedegreen and PFMC members:

As a local elected official from a coastal county, I am writing in support of the Pacific Fishery Management Council (PFMC) work to develop an Ecosystem Fishery Management Plan.

It has been long recognized that in order to have long-term sustainable fisheries and a healthy ocean environment, ecosystem considerations must be incorporated into fishery management. For example, the 1999 report to Congress, "Ecosystem-based Fishery Management," suggests this management approach is likely to contribute to increased abundance of those species that have been overfished, contribute to the stability of employment and economic activity in the fishing industry, and to the protection of marine biodiversity upon which the fisheries and our coastal economies depend. In order to move forward with ecosystem-based fishery management, I support the development of an Ecosystem Fishery Management Plan with the goal of maintaining and protecting ecosystem health and fishery sustainability.

It is important that the PFMC formally integrate ecosystem considerations into the existing Fishery Management Plans (FWs). It is equally important that the PFMC develop an umbrella Ecosystem PMP that can link ecological considerations across the four FMPs (salmon, ground fish, coastal pelagic species and highly migratory species) and manage ecologically important species that fall outside of the current fishery management structure. Specifically, I support an Ecosystem FMP that would address forage species that are important prey for fish in the existing management plans, but are not currently managed by the PFMC. Forage fish are vital for marine ecosystems and leaving enough of them swimming in the ocean is one strategy that will pay off in the long run. Abundant populations of forage species are essential for sustainable fisheries and a healthy ocean. Recognizing this in the Ecosystem FMP by including forage species, implementing conservation and management measures as appropriate, and managing for a healthy forage base would be an important step forward.

Our oceans and coastal communities are facing many challenges. Too often we hear about ecological consequences after the fact because they are not considered in decision-making or directly monitored. I don’t doubt that it will be difficult, but moving forward with an
ecosystem-based fishery management approach is vitally important. Big strides can be made now by developing the Ecosystem FMP framework and including a focus on forage species.

Thank you for considering my perspective.

Very truly yours,

Pete Sorenson
Lane County Commissioner
May 30, 2011

Mr. Mark Cedergreen, Chair
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384

Dear Chair Cedergreen,

Thank you for this opportunity to offer our thoughts and concerns regarding the Pacific Fishery Management Council’s (Council) development of an Ecosystem Fishery Management Plan (Plan).

**Historical Perspective**

The concepts being discussed with respect to the development of this Plan are not new or revolutionary. Ecosystem-based fishery management (EBFM) and its scientific underpinnings have been extensively reviewed and vetted within the Magnuson-Stevens Act context and process, with implications for management becoming clearer as the discussion and the scientific foundation evolves.

As early as 1998, the Ecosystem Principles Advisory Panel (EPAP), convened by the National Marine Fisheries Service at the request of Congress, produced a report which found that EBFM, “will contribute to the stability of employment and economic activity in the fishing industry and to the protection of marine biodiversity on which fisheries depend.” Since that time, the body of knowledge on EBFM has grown along with calls from government, fisheries managers and the fishing industry itself lauding its merits and advocating its implementation. For example, in 2005 the Pacific States Marine Fisheries Commission convened a panel of scientists to identify a process to help Regional Councils “move forward in incremental ways, from the existing management approaches that generally consider ecosystem interactions in an implicit and often peripheral way, to a management system that, over time, would incorporate explicit EBFM considerations into the fishery assessments themselves.”

The Council has an opportunity here to further establish itself as a leader in the management of marine resources. As an initial step in towards EBFM, we urge this Plan to begin to explicitly consider marine food web interactions and predator-prey

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relationships in the management of fisheries. To that end, this Plan should identify important forage species in the California Current Ecosystem and evaluate the ecological services they provide. It should further help develop mechanisms for the incorporation of ecosystem considerations into the management of existing forage fisheries and be given the authority to apply a precautionary approach to currently unmanaged and non-targeted forage fish species, including options to prohibit directed fishing on select forage species and also to suspend the development of new fisheries on select forage species until scientific knowledge and new management measures can be implemented to protect ecosystem structure and function and ensure sustainability.

Examples of EBFM

As ecosystem science has progressed and the implications for management have become clear, we have seen positive examples of ecosystem principles being incorporated into existing management. In particular with regard to protecting the forage base and the marine food web, we have seen leadership in the Pacific region.

In 1998, the North Pacific Fishery Management Council (NPFMC) amended the Gulf of Alaska and Bering Sea and Aleutian Island Groundfish Fishery Management Plans to identify a list of over 20 important forage species in 9 scientific families and prohibit directed fishing on those species. According to the National Marine Fisheries Service, this was “necessary to conserve and manage the forage fish resource off Alaska….a critical food source for many marine mammal, seabird and fish species.” In 1999, the state of Washington implemented a precautionary fish policy that “manages forage fish from an ecosystem-based approach rather than a single-species approach.” This management plan further emphasizes that “the ability of forage fish to provide a source of food for salmon, other fish, marine birds and marine mammals will be a primary consideration.” In 2006, the Council adopted a prohibition on commercial fishing for all species of krill in West Coast federal waters through its Coastal Pelagic Species Fishery Management Plan (CPS FMP), citing krill as “one of the cornerstones of the entire marine ecosystem.” In 2009, the NPFMC again sought to enact precautionary forage policies through its implementation of the Arctic Fishery Management Plan which prohibited commercial fishing for all species in the Exclusive Economic Zone north of the Bering Strait.

These are solid examples of precautionary forage policies that do not create winners and losers, nor do they have significant negative impacts on existing major fisheries. In fact, we believe proactive and precautionary management of the forage base can help increase both the productivity and sustainability of all of our fisheries. Moreover, conservation groups are not alone in this view. The NPFMC’s ban on new fisheries for

3 50 CFR 679. See also June 2004 PFMC Meeting. Exhibit G.4.a Situation Summary.
5 Please refer to June 2004 PFMC Meeting. Exhibit G.4.b. Letter from Monterey Bay National Marine Sanctuary to PFMC Chair Donald Hansen.
Forage species is hailed in a commercial fishing industry sponsored study as one of thirteen “best practices in ecosystem-based fishery management.”

Ecosystem Indicators

As has been discussed by the Council, one of the objectives of this Plan will be to establish a suite of indicators of ecosystem status for the Council to monitor and utilize in the decision making process. We strongly feel that overall forage abundance and density is an appropriate indicator of ecosystem status. We further understand that the Council is seeking to work with the National Marine Fisheries Service’s Integrated Ecosystem Assessment for the California Current Ecosystem to hone its scope of inquiry to issues important to the Council. As this process unfolds and as ecosystem science expands, we encourage the council to establish benchmarks of forage abundance against which the forage indicator may be measured. As noted above, we also believe this Plan should identify important forage species and evaluate the ecological services they provide to the ecosystem. This information should then be used, in conjunction, to develop conservation and management measures that protect and conserve the forage base. At the outset, we acknowledge that much of this information will be qualitative. However, as noted by the PSMFC’s panel, “As models become refined and better understanding of species interactions is obtained (through data collection and field research programs), the implications of these changes for fisheries management may be better understood.”

Cross-FMP Issues (EFH, ESA, Cumulative Impacts & Forage Base)

As the Council’s various advisory bodies have deliberated on the merits of EBFM and the implications it could have for their respective fisheries, there have been a suite of issues identified as pertaining to all the existing Fishery Management Plans (FMPs). Because these issues cut across all the FMPs, we believe they are best addressed within the context of an Ecosystem FMP. These issues include among others, essential fish habitat (EFH) and spatial management, Endangered Species Act listed and protected species, the cumulative impacts of all the Council’s fisheries and conservation of the forage base upon which the other FMPs rely.

As the Council endeavors to develop management measures to protect EFH, we reiterate comments submitted by the Habitat Committee in March 2011 that supported developing an ecosystem indicator for forage species and recognized that “forage fish are key ecosystem component species and are an EFH component (as prey).”

With regards to protection of the forage base as a cross-FMP issue, we’d like to remind the Council of comments developed by the Coastal Pelagic Species Management Team (CPSMT) in Amendment 13 to the CPS FMP. This amendment states, “The

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8 Please refer to March 2011 PFMC Meeting Agenda Item J.1.d, Supplemental Habitat Committee Report
identification and monitoring of indicator species and the role species play in the food web are likely to be important issues for the E-FMP….It may become more practical to monitor species for their ecological role and associated ecosystem functions under the E-FMP rather than in the EC (Ecosystem Component) categories of the Council’s four FMPs.” This document goes on to state, “There are many small pelagic nekton species (primarily fish and squid) that are not presently a target of commercial fisheries….These forage species, together with presently managed coastal pelagic species, comprise the forage base for the California Current ecosystem. As the Council moves to developing an E-FMP, it is important that key populations of forage species are monitored, their role in the food web identified, as well as identifying how fluctuations in forage species abundances affect CPS abundance.”

We wholeheartedly concur with the CPSMT that an Ecosystem FMP is the proper place to address ecosystem-wide forage base issues. However, as the Plan begins to identify policy tradeoffs and management scenarios are evaluated, we believe it should have the authority to implement management measures on cross-FMP issues like the forage base, rather than having to address those issues within the context of singlespecies/species complex FMPs.

Optimum Yield & National Standard Guidelines

It should be objectively clear that the Plan will help the Council’s existing FMPs come into compliance with the Magnuson-Stevens Fishery Management and Conservation Act, which requires that, “Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield (OY) from each fishery for the U.S. fishing industry.”\(^9\) As you know, the statute defines OY to be Maximum Sustainable Yield as reduced by relevant economic, social and ecological factors.\(^1\)

In regards to economic considerations, we believe the management of forage species should consider new scientific studies evaluating the economic value of forage species as forage for other recreationally and commercially important species relative to their economic value as commercially targeted stocks.

In regards to ecological considerations, the National Standard 1 Guidelines articulate that “consideration should be given to managing forage stocks for higher biomass than BM\(_{\text{MSY}}\) to enhance and protect the marine ecosystem.”\(^1\) Among others, considerations under this section should include the relative contribution of a particular forage stock to the diets of key predators with respect to population trends and ocean conditions and the results of modeling analyses to identify the potential effects of alternative harvest strategies.

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\(^1\) 16 USC 1851 § 301(a)(1)

\(^1\) 16 USC 1802 § 3(33)(B)

\(^1\) 50 CFR § 600.310(e)(3)(iv)(C).


Regulatory Authority

We believe it is appropriate and warranted for the Plan to be given management and regulatory authority to address cross-FMP issues and concerns such as the forage base of the California Current, cross-FMP essential fish habitat (including prey), the recovery of protected species, and the cumulative impacts of all the Council’s FMPs on the ecosystem. To this end, we echo the sentiments of the PSMFC’s panel that suggested steps to further EBFM considerations, including “developing indicators of ecosystem health and a program to monitor these indicators, developing decision rules based on the indicators and defining, evaluating and revising various management strategies to better meet goals.”13

With respect to the forage base in particular, we believe that this Plan should be given the authority to implement conservation and management measures in order to establish a precautionary policy on new forage fisheries. Moreover, we believe that this view is consistent with the penumbra of scientific opinion, including the EPAP’s recommendation to “change the burden of proof.”14

Conclusion

In closing, we’d like to thank the Council for the sincere and deliberate process by which it has sought to develop an Ecosystem FMP. We believe a Plan that embodies the philosophy of adaptive management and evolves over time to incorporate peer-reviewed and rigorous ecosystem principles and management actions will greatly improve both the sustainability and productivity of our fisheries. As the Plan provides decision makers with a better understanding of fisheries impacts on the ecosystem, it will ultimately enable the Council to improve the management and stewardship of our oceans.

We appreciate the Council undertaking this endeavor and look forward to working with all stakeholders to maintain healthy oceans and sustainable fisheries.

Thank you in advance for your time and consideration.

Sincerely,

Steve Marx
Senior Associate
Pacific Fish Conservation Program
Pew Environment Group

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