UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

August 24, 2007

William L. Robinson
Pacific Islands Regional Administrator
National Marine Fisheries Service
1601 Kapiolani Boulevard, Suite 1110
Honolulu, HI 96814

Subject: Revised Draft Supplemental Environmental Impact Statement (DSEIS) for the Draft Amendment 14 to the Fishery Management Plan for Bottomfish and Seamount Groundfish Fisheries of the Western Pacific Region, Measures to End Bottomfish Overfishing in the Hawaii Archipelago (CEQ # 20070288)

Dear Mr. Robinson:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

The revised DSEIS replaces the DSEIS dated March 2006 and evaluates an amendment to the Bottomfish and Seamount Groundfish Fishery Management Plan to address overfishing in the bottomfish complex in the Hawaiian Archipelago. The proposed action is being reexamined in this revised DSEIS because the 2006 bottomfish stock assessment information concluded that a minimum 24% reduction in fishing mortality would be required to end overfishing instead of a minimum 15% reduction as originally proposed. Alternative 7 is the preferred alternative and proposes a Total Available Catch (TAC) approach to end bottomfish overfishing, phased in after 2 years of seasonal closures, and implementation of reporting and tracking programs.

Based on our review, we have rated the revised DSEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"). The revised DSEIS identifies barotrauma mortality from regulatory discards and high-grading as a concern for any TAC approach, but it is unclear whether the preferred alternative includes all practicable measures to reduce this impact. The revised DSEIS should provide additional information to clearly identify how each alternative contributes to barotrauma mortality. In addition, the document should include information about the State's concurrence with the action alternatives, which is required for their implementation.

EPA appreciates the opportunity to review this DSEIS. When the Final SEIS is released for public review, please send <u>one</u> copy to the address above (mail code: CED-2). If you have

any questions, please contact me at (415) 972-3988 or Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

Sincerely,

Nova Blazej, Manager
Environmental Review Office

Enclosures: Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: Kitty M. Simonds, Executive Director, Western Pacific Regional Fishery Management Council

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

EPA DETAILED COMMENTS ON THE REVISED DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT, MEASURES TO END BOTTOMFISH OVERFISHING IN THE HAWAIIN ARCHIPELAGO, AUGUST 24, 2007

High-grading and Barotrauma

Deep-slope bottomfish generally have a high mortality rate resulting from barotrauma (damage from expanding air in the swim bladder) after they are brought to the surface, and this is a concern with any Total Available Catch (TAC) alternative due to high-grading (discarding lower value species to allow catch of higher value species). The revised DSEIS identifies this concern but does not include incentives to avoid high-grading or state how alternatives can be formulated to minimize barotrauma mortality. Changes to the non-commercial bag limit to include less desirable species could encourage high-grading.

The revised DSEIS states that there are ways to mitigate barotrauma and increase survivability of the deep-water fish with gas bladders (p. 4-49). Methods to alleviate barotrauma include venting the air bladder with a needle or releasing fish "at-depth" using techniques to sink the fish quickly back down, such as the Git-R-Down© Barotrauma Reversing Fish Release. The preferred alternative does not require barotrauma mitigation or seem to include any incentives to encourage barotrauma alleviation by fishermen.

The revised DSEIS also states that there could be mortality of Deep 7 species after the TAC is reached due to regulatory discards from fishermen targeting bottomfish species other than Deep 7 (p. 4-49). There is no further discussion of this impact and it is not clear how significant it is expected to be.

> *Recommendation:* In the FEIS, we suggest including a comparison table that qualitatively compares the impacts of the alternatives, including the risk of high-grading and barotrauma mortality. This would more clearly present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public (40 CFR 1502.14).
>
> EPA recommends that measures to minimize barotrauma mortality be included in the TAC alternatives. Discuss the practicability and success-rate for alleviating barotrauma by venting air bladders, including the potential for infection. Discuss the feasibility of including incentives for use of Git-R-Down© or similar methods to release fish at depth. Discuss levels of barotrauma symptoms and survivability of fish showing severe symptoms, and if different responses are appropriate for different levels of severity. Describe what educational programs are currently in effect and what fishermen presently do or are expected to do to address barotrauma in bycatch or non-target fish.
>
> Include additional discussion regarding impacts from regulatory discards of Deep 7 species after the TAC is reached including a discussion of the severity of the impact. Propose additional mitigation as appropriate.

Concurrence by State
All alternatives require the State of Hawaii to institute parallel regulations. Alternative 2 requires a concurrent State closure, and the TAC alternatives require the State to also establish a parallel requirement since both the State and Federal waters would have to be closed once the TAC was reached (p. 2-10). The revised DSEIS does not indicate whether the State has agreed to concurrent action for any of the alternatives. This is important, especially since in the original DSEIS, the State did not agree to actions, forcing the National Marine Fisheries Service (NMFS) and the Western Pacific Regional Fishery Management Council (Council) to select as its preferred alternative the only alternative not requiring concurrent action by the State.

> *Recommendation:* In the FEIS, identify whether the State has agreed to concurrent action necessary for each of the project alternatives.

Non-Commercial Reporting Accuracy
The revised DSEIS makes clear that the lack of information on the non-commercial catch in the Main Hawaiian Islands is a significant data gap hindering determination of actual total catch and effort (p. 1-6). The preferred alternative changes the non-commercial bag limit from the current 5 onaga and/or ehu per person per trip, to 5 of any of the Deep 7 species of bottomfish combined per person per trip. The current non-commercial catch of lehi, opakapaka, gindai, kalkale, and hapuupuu is unknown (p. 4-54) and there currently is no limit on catch of these Deep 7 species.

Phase 3 of the preferred alternative would implement Federal reporting requirements for non-commercial fishermen who target or catch any bottomfish species. Because the bag limit will be in place for species previously unlimited in catch by non-commercial fishermen, it is not clear how the accuracy of this reporting will be ensured. The revised DSEIS does not discuss the quality of data that would be received under such a scenario, or if it seems likely that fishermen will report catches above the bag limit since this would be a violation of that limit. Depending on the enforcement of the bag limit during this Phase, this arrangement may discourage accuracy in this first round of non-commercial catch data, which will be important in setting the first non-commercial TAC for the following year.

> *Recommendation:* In the FEIS, discuss the expected accuracy of data received from non-commercial fishermen. Discuss and consider the benefits of keeping the bag limit unchanged so that there are no incentives to underreport this first year of catch data. Identify other options to ensure quality data collection of the non-commercial catch. EPA recommends that the quality of the non-commercial data be considered when selecting an alternative for implementation.

Setting of the Total Available Catch (TAC)
The purpose and need for the project is to reduce bottomfish overfishing, which is primarily occurring in the Main Hawaiian Islands (MHI). NMFS and the Council propose to reduce total fishing effort by 24% to meet this goal. The preferred alternative proposes utilizing a TAC approach, and setting the TAC at 24% of the commercial catch for the first year until non-commercial data are collected, after which both the commercial and non-commercial TAC would be established. Until non-commercial catch data are available, the non-commercial catch would continue to be managed by bag limits, modified to include 5 fish of any Deep 7 species. Since

the non-commercial catch is presently unknown, it is not clear whether this change in the bag limit will accomplish at least a 24% reduction in non-commercial catch, which would be needed to achieve a total 24% reduction in fishing effort in both sectors.

> *Recommendation:* In the FEIS, explain how it was determined that the initial phases of the preferred alternative will be effective in reaching 24% reduction in fishing effort for the non-commercial catch. The stock assessment (p. 10) indicates that a larger reduction in fishing effort than 24% would be needed to support a risk-averse management policy. If there is insufficient reason to expect the bag limit changes will result in a 24% reduction in non-commercial catch, or if the bag-limit changes are not implemented, EPA recommends a larger reduction in fishing effort to achieve the purpose and need.

Fishing During Spawning Season

Alternative 2 is a summer closure (May-September) and is estimated to reduce fishing effort by around 25%, (p. 4-9). Spawning of bottomfish occurs over a protracted period and peaks from July to September (p. 3-8). The Preferred Alternative includes a May through September closure for 2007, but Phase IV (2008) closure extends through August only.

> *Recommendation:* In the FEIS, discuss what benefits are expected from avoiding fishing during the peak spawning periods. If substantial benefits are probable, EPA recommends beginning the 2008 season October 1st to avoid fishing during an additional month of peak spawning. The revised DEIS indicates that other fishing opportunities are available during the summer months and that tradition makes summer closures more acceptable to Native Hawaiians compared to other alternatives (p. 4-55).

Alternatives Analysis

We understand that the reauthorized Magnuson-Stevens Act (MSA) requires implementation of annual catch limits by 2010-2011. Table 1 (p. xvi) indicates that all alternatives except Alternative 2 and the No Action alternative include a total available catch (TAC) "per the new MSA" but no other discussion is included. It is not clear whether an annual catch limit necessarily requires that a TAC alternative be implemented for this effort to reduce overfishing, or if an annual catch limit can take another form. Alternative 2, a seasonal closure, includes catch reporting which could be applied towards establishing an annual catch limit. Alternative 2 appears to have merits in that it is supported by many fishermen and does not have the risk of high-grading/barotrauma mortality associated with a TAC alternative.

> *Recommendation:* In the FEIS, clarify whether the reauthorized MSA eliminates the consideration of Alternative 2. If Alternative 2 would be consistent with the requirements of the reauthorized MSA, we request additional information as to why this alternative is not preferred.

Cumulative Impacts from Climate Change

The revised DSEIS states that an important component of the habitat for many bottomfish species appears to be the association of high-relief areas with water movement, and that bottomfish density has been shown to be correlated with areas of high relief and current flow (p. 3-4). Ocean currents and eddies and the thermocline gradients that cause them are discussed on

p. 3-3, and the role of currents in oceanic food web productivity trends are identified. The revised DSEIS also identifies the effect of large-scale temperature or climate variation on bottomfish larval transport (p. 3-8).

The revised DSEIS does not, however, include any discussion of the cumulative effects of climate change on bottomfish habitat or productivity, or how this could affect NMFS's and the Council's efforts to reduce bottomfish overfishing. The effects of climate change also include sea level rise, increases in climatic variability, and increases in extreme weather events[1].

> *Recommendation:* In the FEIS, discuss how the effects of climate change will cumulatively impact present bottomfish productivity and how this might affect the success of the evaluated alternatives. If significant effects are identified, NMFS and the Council should factor these into the selected alternative, such as utilizing a larger reduction in fishing effort for a more risk-averse management policy.

[1] Intergovernmental Panel On Climate Change (IPCC) Report on Impacts, Adaptation & Vulnerability, April 2007. Available: http://www.ipcc.ch/