ESTIMATED TIME

16 HOURS

(All D-1 Items)

MEMORANDUM

TO:

Council, SSC and AP Members

FROM:

Chris Oliver

Executive Director

DATE:

November 25, 2002

SUBJECT:

BSAI Rockfish management

ACTION REQUIRED

(b) Review NMFS discussion paper on BSAI rockfish management

BACKGROUND

BSAI rockfish management

As part of its action to adopt 2003 BSAI preliminary and interim specifications in October 2001, the Council requested that NMFS staff prepare a discussion paper for this meeting on short and long term approaches to managing BSAI rockfish. The Council requested that the paper first address rockfish management for 2003, including issues associated with reliable identification of species; NMFS strategy for collecting species-specific information; and considerations for breaking out the SR/RE TAC in the Aleutians Islands by district. Second, it was requested to address implications for more long term (2004 and beyond) management of the red rockfish complex that address the scientific information/research necessary to support separate species management by area; management implications of separate species OFLs/ABS/TACs; adequacy of existing survey methodology for these species and potential enhancements to existing protocol to address shortcomings; and potential management response to ongoing and perhaps unavoidable bycatch. NMFS staff will present the discussion paper, which is attached as Item D-1(b).

Discussion Paper on 2003 Management of BSAI Rockfish Species

NMFS Alaska Region November 15, 2002

In October 2002, the North Pacific Fishery Management Council requested the National Marine Fishery Service to review rockfish management for 2003, including discussions of reliable species identification within the shortraker/rougheye rockfish species group and apportioning the TAC for shortraker/rougheye rockfish among the Bering Sea subarea and 3 Aleutian Islands subarea districts. The Council also requested a discussion of long term management of the red rockfish complex that addresses: the scientific information necessary to support separate species or stock management by area; management implications of separate species OFLs/ABCs/TACs by management area; adequacy of existing survey methodology for these species and potential enhancements to existing protocol to address shortcomings; and potential management response to ongoing and perhaps unavoidable bycatch.

This discussion paper reviews the implications of creating 3 separate TACs in the Aleutian Islands subarea for shortraker/rougheye species group. Table 1 compares the catch of shortraker/rougheye through October 26, 2002, to the TAC distributions by districts in the Aleutian Islands subarea and the Bering Sea subarea. The TAC distributions were provided by the Alaska Fisheries Science Center and are based on survey biomass distributions from 1991 through 2002. The discussion paper reviews 2003 management issues for CDQ rockfish species and presents NMFS's 2003 strategy for assessing the use of observer data for purposes of species-specific catch monitoring of shortraker and rougheye rockfish in 2004 and beyond. Last, this paper provides an overview of information on long range planning for rockfish research and management that will be presented to the Council in February 2003.

Management of Bering Sea and Aleutian Islands Subarea Shortraker/Rougheye TACs in 2003

The shortraker/rougheye complex has been managed as such in the Aleutians Islands subarea since 1992 and in the Bering Sea subarea since 2001. The overfishing level and ABC for shortraker/rougheye is established for the BSAI and TACs are applied to the two constituent subareas. Prior to 2001, the complex was managed in the Bering Sea subarea as part of the 'other red rockfish' species group (which included shortraker, rougheye, sharpchin and northern rockfish), and OFL and ABC were established by subarea rather than across the BSAI. Whether managed as a distinct complex or as part of the 'other red rockfish' category, the species group has not been open to directed fishing, that is, it has only been allowed to be taken in proportion to other species that are open to directed fishing.

In 1997, the ABC for shortraker/rougheye in the Aleutian Islands (938 mt) was caught. To prevent overfishing of the complex, special reporting requirements were implemented, many fisheries were closed, and other groundfish catch forgone to prevent overfishing of the complex. The estimated catch for 1997 was 1,043 mt, or 207 mt less than the overfishing level of 1,250 mt. In 1998 the Council recommended and NMFS implemented a revision of the maximum retainable bycatch of shortraker/rougheye. Retention was reduced from 15% as part of aggregated rockfish that are closed to directed fishing. Shortraker/rougheye was separated as a species category and retention was limited to 7% of deep water species and to 2% of shallow water species. During that same year, under Amendment 53, the TAC of shortraker/rougheye in the Aleutians was allocated 30% to vessels using hook-and-line gear and 70% to vessels using trawl gear.

In October 2002, the Council heard public testimony that expressed an interest in apportioning the shortraker/rougheye TAC in the Aleutian Islands subarea among districts. Table 1 compares the 2002 catch by district with the potential 2003 distribution of TAC among the same areas. Under the current management structure and potential Aleutian Islands TAC distributions, a disproportionate catch of shortraker/rougheye in the Aleutian Islands subarea is not detected. This may be because the primary targets for trawl gear (Atka mackerel and Pacific ocean perch) which take the greatest amount of groundfish in the Aleutian Islands (65% of the groundfish harvest), are apportioned by district. Retention of shortraker/rougheye rockfish in the Atka mackerel target is limited to 2% and in the Pacific ocean perch target, 7%. The estimated retention of shortraker/rougheye relative to retained Pacific ocean perch in that target in 2002 has averaged about 4%.

Table 1. Catch in metric tons of the 2002 shortraker/rougheye species complex (through October 26) by Bering Sea subarea and Aleutian Islands Districts relative to submitted 2003 TACs. Catch data are through 10/26/02.

| | BSAI (ABC) | Bering Sea Subarea | Eastern Aleutian | Central Aleutian | Western Aleutian |
|-----------------------|------------|-----------------------|---------------------|---------------------|---------------------|
| Submitted 2003 TAC | 967 | 137 | 216 | 335 | 279 |
| 2002 Catch | 570 | 99 | 175 | 122 | 173 |

In 2002 three quarters of the Aleutian Islands catch of shortraker/rougheye occurred in trawl targets and the remainder in hook-and-line. Within the trawl fishery, the Pacific ocean perch target accounted for 69% of the total catch and Atka mackerel 7%. Within the hook-and-line fishery, the sablefish target accounts for 15% and Pacific cod 8% of the total catch (Appendix 1). The two hook-and-line fisheries retained about 25% of the shortraker/rougheye they caught. Trawl Atka mackerel retained 65% and Pacific ocean perch 86% of their catch.

The breakout of shortraker/rougheye rockfish into the three separate TACs in the Aleutian Islands districts from one TAC for the subarea may have several ramifications for management.

While examination of the 2002 data doesn't indicate catches in excess of the TACs, if the distribution of the target species (Pacific ocean perch, Atka mackerel or sablefish) or shortraker/rougheye change significantly in the surveys the relative catch may change as well. For example if the distribution of Pacific ocean perch were to change (though survey data indicates the relative distribution of POP has remained fairly consistent over the last 10 years), the bycatch of shortraker/rougheye rockfish could increase or decrease by district perhaps increasing the incidental catch in one district to the point of exceeding a TAC. Likewise if the absolute amount of a target species increased greatly and the shortraker/rougheye TACs remained consistent, the district specific TACs could be approached or exceeded. If a shortraker/rougheye TAC were exceeded it would have to be placed on prohibited species status and any future catch of shortraker/rougheye would be required to be discarded.

It is difficult to determine whether changing the status of shortraker/rougheye so that retention is prohibited as the target fishery continues will significantly reduce or terminate the mortality of shortraker/rougheye. Previous studies of shortraker/rougheye bycatch in the Pacific ocean perch target (the target group that took the greatest amount of shortraker/rougheye as bycatch, has the highest MRB, and greatest potential for 'topping off') indicate bycatch rates from survey data of about 2%. Observer data from the Pacific ocean perch fisheries in the Aleutians during July of 2002 show bycatch rates per vessel ranging from 2% to 7% with an overall rate of 3% for 5 trawl c/ps that participated in the fishery. Fishery data might be higher

because catcher/processor vessels are targeting rockfish in general and do have an economic incentive to retain shortraker/rougheye which may result in 'topping off' activity. If shortraker/rougheye are prohibited to retention, bycatch rates of at least 2% for the remainder of the fishery could be expected, resulting in that amount of discard. Appendix 1 and 2 to this discussion paper provides a summary of 2002 and 2001 catch data of shortraker, rougheye, and northern rockfish by fishery. Monthly catch amounts and catch rates are provided.

Aleutian Islands district-specific TACs create three much smaller catch limits to manage. Dividing an ABC into small groups increases the management complexity. As TACs become smaller, inseason management becomes less flexible and closures become pre-emptive rather than based on current inseason data. This condition is especially true for species or species groups that are incidentally caught in relatively small target fisheries like the three Pacific ocean perch fisheries in the Aleutian Islands. In order to prevent exceeding the suggested shortraker/rougheye TACs, inseason management may have to prohibit retention earlier than necessary to ensure they're not exceeded, which could have the effect of increasing discards.

Other approaches can be developed to conserve shortraker/rougheye. For example in the Pacific ocean perch fishery the maximum retainable bycatch rate for shortraker/rougheye could be further reduced to minimize 'topping off' potential if it is indeed occurring. This potential was the motivation for the MRB reduction in 1998. Another option is to examine restrictions on the type of trawl gear that can be used to target Pacific ocean perch and the amount of shortraker/rougheye that can be retained. The Aleutian Islands Pacific ocean perch fishery currently is conducted with non-pelagic trawl gear. In the Gulf of Alaska rockfish fisheries, some catcher/processors and catcher vessels use pelagic trawl gear to target Pacific ocean perch. Observer data from this year's fishery indicate no bycatch of shortraker/rougheye in the pelagic trawl gear fishery and catch rates of about 95% Pacific ocean perch.

While current data indicate disproportionate harvest is not occurring, changes in the population structure could change the relationship between the target fisheries and the shortraker/rougheye complex. Splitting the Aleutian Islands TAC into three TACs will decrease the flexibility and increase the complexity of inseason management. Creating three TACs may increase the potential for discards. If the intention is to restrict the catch of shortraker/rougheye in the target fisheries that take them, other approaches may be more appropriate without increasing the complexity for management and risking additional discards.

Management of Bering Sea Shortraker, Rougheye, and Northern Rockfish in the 2003 CDQ Fisheries

The CDQ Program allocates a portion of all BSAI TACs, except squid, to CDQ reserves. The allocations are 10% of the pollock TAC, 20% of the fixed gear sablefish TAC, and 7.5% of all other groundfish TACs and prohibited species catch limits. Regulations at 50 CFR 679 further allocate these CDQ reserves among the six CDQ groups based on percentage allocations recommended by the State of Alaska and approved by NMFS. The most recent percentage allocation recommendations apply for the three year period of 2003 through 2005.

NMFS regulations prohibit the CDQ groups from exceeding any of the quotas allocated to them. Quota overages are violations of NMFS regulations and result in enforcement actions against the CDQ group. Although NMFS does not require the CDQ groups to stop fishing when any one of its quotas has been reached, the prohibition against exceeding a quota and the resulting enforcement actions have the effect of limiting further CDQ fisheries once any quota has been reached. Almost all groundfish species and halibut prohibited species quotas are caught in each of the CDQ groups' target fisheries. Continuing to fish, therefore, while avoiding most of the species with CDQ allocations is very difficult..

The Bering Sea "other red rockfish" species group was split into BS sharpchin/northern and BS shortraker/rougheye in 2001, and into BS northern and BS shortraker/rougheye in 2002. Similar groups for these rockfish species are expected to be recommended for 2003. These species groups result in relatively small TACs, CDQ reserves, and allocations to the individual CDQ groups. A complicating problem is that the State's CDQ allocation recommendations for 2003-2005 provides allocation recommendations for BS "other red rockfish," rather than the two species categories that will exist in 2003.

Tables 2 and 3 show the amount of BS northern and BS shortraker/rougheye that would be allocated to the six CDQ groups in 2003, based on recommended ABCs for 2003 and the State's allocation recommendations for BS Other Red Rockfish.

Table 2. Estimated 2003 CDQ Reserve for BS Northern Rockfish and BS Shortraker/Rougheye Rockfish (in metric tons).

| Species Category | ABC | TAC | CDQ Reserve (7.5%) |
|------------------------|-----|-----|--------------------|
| BS Northern | 18 | 18 | 1.35 |
| BS Shortraker/Rougheye | 137 | 137 | 10.275 |

Table 3. Allocation of the Estimated 2003 CDQ Reserve for BS Northern Rockfish and BS Shortraker/Rougheye (SR/RE) Rockfish among the CDQ groups (in percentage and metric tons).

| CDQ Group | % Allocation | BS Northern | BS SR/RE |
|---------------|--------------|-------------|----------|
| APICDA | 21% | .284 | 2.158 |
| BBEDC | 19% | .257 | 1.952 |
| CBSFA | 7% | .095 | 0.719 |
| CVRF | 17% | .230 | 1.747 |
| NSEDC | 17% | .230 | 1.747 |
| YDFDA | 19% | .257 | 1.952 |
| Total Reserve | 100% | 1.35 | 10.275 |

Assumes State of Alaska recommended percentage allocations for BS other red rockfish for 2003-2005.

These allocations would result in all CDQ groups having quota balances of less than a ton for BS Northern rockfish. For example, CBSFA would have a quota of 95 kg of BS northern rockfish to support all of its BSAI CDQ fisheries.

One of the goals of the multispecies CDQ allocations was to provide the CDQ groups with quotas for all groundfish species and prohibited species, but require the CDQ groups to be more accountable than other sectors for catch of target, non-target, and prohibited species. However, another equally important goal of the multispecies CDQ allocations was to provide additional allocations to support economic development goals for Western Alaska. Regulations developed in 1997 and 1998 for the multispecies CDQ allocations

would not likely have included strict quota accountability for species categories with TACs as small as some of the rockfish TACs are now getting. The creation of these very small CDQ allocations are an unintended consequence of the Council's recommendations to improve conservation and management of BSAI rockfish.

The Council has requested analysis of alternatives to revise CDQ regulations to address problems related to splitting of the rockfish and "other species" quota categories. However, the appropriate regulatory amendments to address problems in the CDQ fisheries will depend on what the Council recommends for the management of rockfish and "other species" in the BSAI for all fisheries. Permanent revisions to the CDQ Program regulations should be made as part of one of these more general fisheries management actions. Therefore, NMFS proposes the following interim management measures for BS northern rockfish and BS shortraker/rougheye rockfish CDQ in 2003 to provide more time to develop alternatives for regulatory amendments that could address the problems being created by splitting species groups.

- 1. Continue to allocate 7.5% of the TAC as a CDQ reserve for BS northern rockfish and BS shortraker/rougheye rockfish. This allocation is required by the MSA and NMFS regulations.
- 2. Do not allocate BS northern rockfish or BS shortraker/rougheye rockfish among the six CDQ groups. NMFS will consider whether the decision to not allocate these species among the groups can be made through the 2003-2005 CDQ allocation process, which must be complete before the 2003 CDQ fisheries start. If this approach is not possible, NMFS will consider an enforcement policy.
- 3. Continue to require each CDQ group to report its catch of these species through the standard CDQ catch reporting procedures and to follow all other CDQ catch accounting regulations, including observer coverage and equipment requirements. Monitor the catch of these rockfish species by each CDQ group, and monitor the overall catch in the CDQ Program.
- 4. If CDQ allocations of BS northern rockfish and BS shortraker/rougheye rockfish are not made to individual CDQ groups, the groups would not violate NMFS regulations related to quota overages for their catch of these species.
- 5. Manage the CDQ allocations of BS northern rockfish and BS shortraker/rougheye rockfish at the CDQ sector level. Use regulations at 50 CFR 679.20(d), which already apply to the CDQ allocations, to manage the catch of these species in the CDQ fisheries. These regulations allow NMFS to establish retention standards and to close directed CDQ fisheries, if these measures become necessary to maintain total catch within allocations, ABCs, and OFLs. These measures have not been necessary to date in the multispecies CDQ fisheries, because of the allocations to each group and strict quota accountability. However, they would be necessary to manage species allocated to the CDQ sector, but not to individual groups.
- 6. Under §679.20(d), if the catch of BS northern rockfish or BS shortraker/rougheye rockfish approaches the overfishing limit, NMFS would have to take management action to prevent overfishing of these species. The CDQ fisheries would be among those fisheries that NMFS would consider for closure to prevent overfishing. NMFS could issue a closure notice that would prohibit any vessel fishing for a CDQ group from participating in a specified directed fishery. As with the non-CDQ fisheries, these closures could be focused on target species, gear type, or area.

NMFS's 2003 Strategy for Assessing the Use of Observer Data for Species Specific Catch Monitoring of Shortraker and Rougheye Rockfish

Shortraker and rougheye rockfish are currently managed as a group. The Plan Team and Council have expressed interest in separating the species, so that ABCs, TACs and overfishing levels could be established by species. Separating shortraker and rougheye rockfish is problematic because the two species are caught together in a broad range of trawl and fixed gear fisheries and they can be very difficult to reliably distinguish. So long as the species are managed as a group, the accuracy of species identification does not pose a significant quota monitoring issue. However, if the species are separated for management, accuracy of species identification becomes critical.

In order to separate shortraker and rougheye for management purposes, a system for accounting catch of the two separate species must be developed that is unbiased. Two key catch accounting issues have been identified:

- 1. Observer data collection practices on longline vessels must be modified to ensure an unbiased sample of shortraker and rougheye rockfish are taken for species identification. The current sampling practices result in adequate estimates for the shortraker-rougheye group, but can bias individual species estimation.
- 2. Identification of the two species in commercial catch data is probably biased. Commercial catch is generally sorted by color. Shortraker rockfish and the rougheye rockfish that are completely red in color form one market and are more valuable than darker colored rougheye rockfish. This market-category sorting results in some rougheye rockfish reported in the commercial catch as shortraker rockfish.

As a result of these catch accounting issues, shortraker and rougheye rockfish should continue to be accounted for and managed as a group, until acceptable methods can be developed to adequately account for them separately. The following actions will be taken in 2003:

- 1. Shortraker-rougheye will be managed as a group.
- 2. The observer program will conduct a special project to evaluate changes in observer sampling procedures to collect unbiased species composition data on the proportion of shortraker and rougheye rockfish in longline sets.
- 3. NMFS will assess whether the changes in procedures result in significant improvements in the available data from the longline fishery.
- 4. NMFS will assess the feasibility of utilizing unbiased species composition data from observed vessels to estimate the composition of the commercially-reported catch (including catch by unobserved vessels), because species identification by the industry is unlikely to be improved significantly or made verifiable.
- 5. NMFS will notify the Plan Teams prior to the fall 2003 meetings whether a suitable methodology for separating the species can be implemented for 2004.

Long-range Planning for Rockfish Research

Several important factors affect the assessment and management of rockfish in the north Pacific, including variability in survey biomass estimates, genetic stock structure, and rockfish habitat associations at various life history stages. The Rockfish Working Group (RWG), a collection of rockfish assessment and survey

scientists within the Alaska Fisheries Science Center, has a history of conducting and supporting research addressing each of these topics. Work conducted by the RWG on reducing variability in survey biomass estimates originated with studies evaluating different net designs and has progressed to examination of various survey designs such as adaptive sampling and double sampling with sonar.

Evaluating survey designs that incorporate sonar and trawl technologies is an active area of research, and analyzing echosign data collected in the 2002 Aleutian Islands and eastern Bering Sea trawl surveys will be the focus of future research. Rockfish density estimates can also be obtained from submersible vessels. Submersible research on shortraker and rougheye rockfish has been conducted in the eastern Gulf of Alaska in the early 1990s and, more recently, in the Aleutian Islands in 2002. Additional information from submersible research includes habitat associations of rockfish, and fine-scale observations on the patchiness of some rockfish species. Recently, additional information on earlier life-history stages is obtained from examination of rockfish collected opportunistically in pollock larval surveys and juveniles collected from tows of the Ocean Carrying Capacity research. Additionally, research on habitat association, growth, and diet composition of juvenile rockfish in near-shore waters (using ROV, beach seines, and SCUBA) has been supported by the RWG.

Finally, the issue of rockfish stock structure has particular relevance in the Bering Sea/Aleutian Islands given the definition of management areas. The RWG has supported Dr. Tony Gharrett of the University of Alaska in his genetic research of stock structure, which to date has largely focused on samples collected in the Gulf of Alaska. However, the development of the EBS slope survey allows for the possibility that more samples will be collected in this area in the future. Pacific Ocean perch tissue samples were collected in 2002. The RWG has also supported and funded the development of a genetic species identification database of larval rockfish using DNA. This is an invaluable tool for determining larval distribution where identification previously could not be made with morphometric measures.

For the February Council meeting, the RWG plans on drafting a paper describing past research and future plans on each of these research topics in more detail.

APPENDIX 1 SPREADSHEETS

| | | 0.60 | 2 % % % % % % % 4 % % % % % % % % % % % |
|--|--|--|---|
| | | Y Y | TRW 7 00% 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| | | TRW W 0.80 | X TR |
| | | 0.75 | 2 |
| | | N TRW B 0.01 0.05 1.59 4.23 31.42 6.49 6.49 6.49 4.04 | TRW P P P P P P P P P P P P P P P P P P P |
| | | P B 3 | A T T T T T T T T T T T T T T T T T T T |
| | | тяw | L L O 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 0% 0 |
| | | | 999999999 |
| 7.22 | % % % % % % % % % % % % % % % % % % % | Ex | TRW 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% |
| 17.22 4.05 0.01 121.28 | X WHY | TRW F | F |
| 9.11 9.11 0.10 0.54 | % | 0.06 0.083 0.14 0.15 0.15 0.15 0.14 | 8 - 7 8 8 4 8 5 8 8 |
| HW IHW 769.06 22.09 750.84 106.16 21,00.39 122.86 3,638.81 115 | TRW C C 20% 13% 00% 00% 00% 554% 14% 14% 93% 93% 93% | 1TRW C C 0.001 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | TRW 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% |
| A 36 | TRW 0% A A O 0% O 0% O 0% O 0% O 0% O 0% O | HHW 8 | TAW 00% 00% 00% 00% 00% 00% |
| 0.00 0.00 10.0 | %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% | S 8 0.00 | POT 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 |
| 0.09 0.00 0.00 0.33 | %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%% | 0.03 0.15 0.15 | |
| 0.01 | S 90% 90% 90% 90% 90% 90% 90% 90% 90% 90% | RTHERN C C C C C 0.06 0.06 0.01 0.01 0.02 | POT 0 % % % % % % % % % % % % % % % % % % |
| Ar J | O H | S HAL | H o |
| HAL C 2.15 0.17 7.04 0.01 1.41 16.65 0.31 | C 0 0% 0 0% 0 0% 0 0% 0 0 0% 0 0 0 0 0 0 | BERING SEA NORTHERN CATCH HAL HAL POT C 0.02 C C 0.17 0.28 0.11 - 0.05 0.80 0.22 - 0.01 1.65 0.01 7.94 0.28 0.31 | C C C C C C C C C C C C C C C C C C C |
| GEAR H CONTROL OF CONT | GEAR HAGET C 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 00 00 00 00 00 00 00 00 00 00 00 00 00 | GEAR HA TARGET C 01 03 03 04 06 06 06 07 08 09 01 01 01 01 01 01 01 01 01 01 |
| | <u> </u> | | |

North Pacific Fishery Management Council

David Benton, Chairman Chris Oliver, Executive Director

Telephone: (907) 271-2809

605 W 4th Ste 306 Anchorage, AK 99501-2252

Fax: (907) 271-2817

Visit our website: www.fakr.noaa.gov/npfmc

AGENDA D-1(b) DECEMBER 2002 SUPPLEMENTAL

October 15, 2002

Ms. Kris Balliet The Ocean Conservancy 425 G Street, Suite 400 Anchorage, AK 99501

Mr. Jim Ayers Oceana, Inc. 175 South Franklin Street, Suite 418 Juneau, AK 99801

Mr. Gerald Leape National Environmental Trust 1200 18th Street NW Washington, DC 20036

Dear Kris et al:

We received your September 24 letter regarding your concerns with BSAI red rockfish, and discussed this issue at some length during our recent October Council meeting in Seattle. We also reviewed a letter from NMFS (dated October 3 and attached) which responded to the issues raised in your letter. That letter details the evolution of management of these species, including the setting of ABC and overfishing levels.

The Council has considered the issue of management of BSAI rockfish on a number of occasions. Throughout these discussions, lack of adequate data has confounded the Council's ability to more effectively address rockfish management. At our October 2002 meeting NMFS proposed to develop a white paper on the status of BSAI rockfish stocks and a plan for improved management. We expect to receive an initial report in December, which NMFS has stated will include information regarding the status of stocks by species and area, and recommendations for management of the 2003 fisheries. A more detailed report may be provided in February 2003 which may provide further data to help guide decisions for management in 2004 and beyond. Included among the items we have requested are: information on how these species will be managed in 2003, under the existing species/area quotas; stock assessment data by species and area (including subareas); issues associated with reliable identification of species; examination of observer protocols, stock assessment methods, and survey techniques; potential new assessment and monitoring techniques; possible approaches to breaking out SR/RE species by subdistrict; and, potential management

implications associated with finer stock resolution. We expect this information to be developed in part through the Plan Team, which will be meeting in November.

In summary, we appreciate the concerns expressed in your letter, and want to assure you that we are working with NMFS to explore ways to better conserve and manage these species.

VI

David Benton

Chairman

Sincerely,

CC: Janis Searles, Earthjustice Legal Defense Fund

Jack Sterne, Trustees for Alaska

Jim Balsiger, NMFS Regional Administrator

Attachment



UNITED STATES DEPARTMENT OF COMMER National Oceanic and Atmospheric Administratio

National Marine Fisheries Service P.O. Box 21668 Juneau, Alaska 99802-1668

October 3, 2002

Mr. David Benton Chairman, North Pacific Fishery Management Council 605 West 4th Street Anchorage, Alaska 99501-2252

Dear Mr. Benton:

You received a letter dated September 24, 2002, from The Ocean Conservancy and Oceana National Environmental Trust that expressed concerns about the management of other red rockfish in the Bering Sea and Aleutian Islands (BSAI). We would like to respond to several points.

Prior to 2000, the Council agreed with the recommendations of the BSAI Plan Team and the Scientific and Statistical Committee (SSC) that the other red rockfish complex be split into northern/sharpchin and shortraker/rougheye groups in the Aleutian Islands subarea (AI), and a combined other red rockfish group in the Bering Sea subarea (BS).

In 2000, when catch of the other red rockfish group exceeded the ABC late in the year, the Plan Team at its November meeting addressed the problem of disproportionate catch within that and other aggregated rockfish species groups in the BSAI. The Plan Team recommended and the SSC concurred that these rockfish species in the Bering Sea and Aleutian Islands subareas should be separated into individual species. They also agreed that, absent scientific evidence to the contrary, the stocks should be managed on a BSAI-wide basis, not on the basis of the constituent subareas. In response to concerns about the ability of observers and industry to indentify shortraker and rougheye reliably, NMFS maintained these species as a group, but established separate TACs for the AI and BS subareas to allow additional management measures to reduce catch. In 2002, in accordance with Plan Team and SSC recommendations, northern rockfish are managed as a single species and sharpchin rockfish are part of the 'other rockfish' group. The 2000, 2001, and 2002, ABCs, OFLs, TACs, and catches are provided in Table 1.



Table 1. "Other red rockfish" specifications and harvest, 2000-2002.*

| Year | 'Area | Species Group | OFL | ABC | TAC | Catch |
|------|------------------|---------------------|-------|-------|-------|-------|
| 2000 | Bering Sea | other red rockfish | 259 | 194 | 194 | 252 |
| | Aleutian Islands | sharpchin/northern | 6,870 | 5,150 | 5,150 | 5,083 |
| | | shortraker/rougheye | 1,180 | 885 | 885 | 480 |
| 2001 | Bering Sea | sharpchin/northern | 9,020 | 6,674 | na | |
| | Aleutian Islands | shortraker/rougheye | 1,369 | 1,028 | na | |
| | Bering Sea | sharpchin/northern | | | 19 | 155 |
| | | shortraker/rougheye | | | 116 | 43 |
| | Aleutian Islands | sharpchin/northern | · | | 6,745 | 6,309 |
| · | | shortraker/rougheye | | | 912 | 722 |
| 2002 | Bering Sea | northern | 9,020 | 6,760 | na | |
| | Aleutian Islands | shortraker/rougheye | 1,369 | 1,028 | na | |
| | Bering Sea | northern | | | 19 | 106 |
| | | shortraker/rougheye | | | 116 | 94 |
| | Aleutian Islands | northern | | | 6,741 | 3,578 |
| | | shortraker/rougheye | | | 912 | 490 |

^{* 2002} catch is through September 21.

Management has responded with the regulatory tools available to minimize rockfish catch where the catch has exceeded the TAC. Directed fishing for rockfish (with the exception of Pacific ocean perch in the Aleutian Islands subarea) in the BSAI has consistently been prohibited from the beginning of the fishing year since 1997. If the TACs are caught, the species or species groups are prohibited to retention. If the ABCs are exceeded, NMFS has consistently restricted fisheries when necessary. Over the last several years, hook-and-line and trawl fisheries have been closed and groundfish catch forfeited to prevent overfishing of northern and shortraker/rougheye rockfish. We are continuing to develop protocols to allow the identification of shortraker and rougheye rockfish in the fishery as individual species.

Additional information regarding stock structure for rockfish in the BSAI will improve the decisions that management makes regarding how the ABCs and OFLs are assigned. The 2002 Bering Sea slope survey likely will add new information regarding population size to the 2002 SAFE reports. Additional management measures, including bycatch avoidance programs may make sense for the Council to consider.

Thus, while we agree that area specific TACs have been overharvested in spite of increasingly restrictive measures to limit catch, we disagree that OFLs have been exceeded. When ABCs have been exceeded we have exercised our regulatory authority to control incidental catch. We have applied the Council recommendations to improve the management structure for rockfish to the extent practicable and expect that more refined management will be pursued as our scientific information on these stocks is enhanced.

Sincerely,

James W/Balsiger

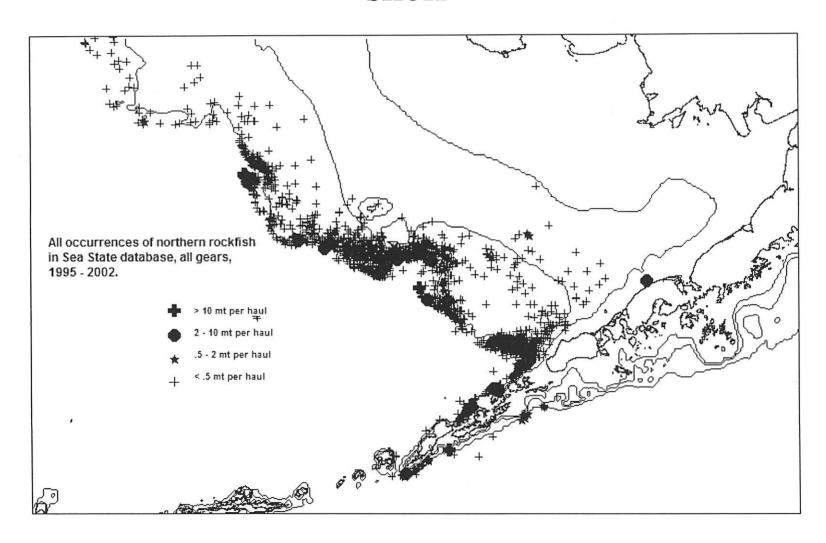
Administrator, Alaska Region

PUBLIC TESTIMONY SIGN-UP SHEET FOR AGENDA ITEM Agenda item D-1(6) BSM rockfish

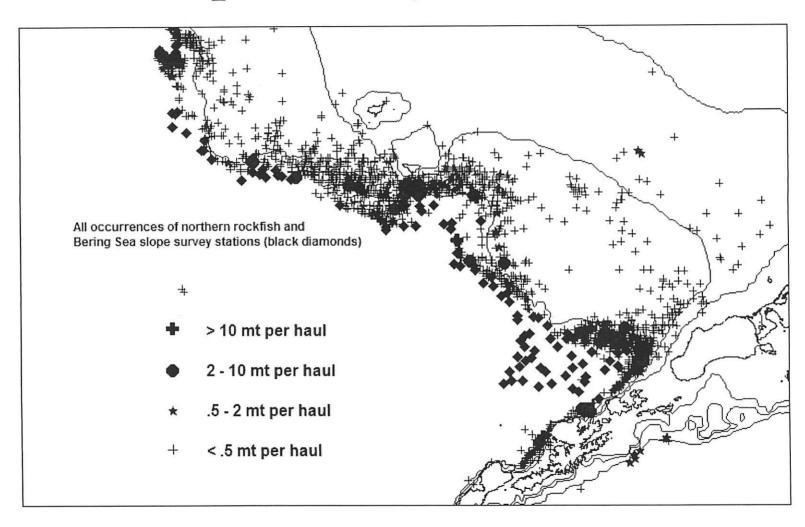
| | PLEASE SIGN ON THE NEXT BLANK LINE. LINES LEFT BLANK WILL BE DELETED. | | | | | | |
|-----|--|----------------------|--|--|--|--|--|
| | NAME | AFFILIATION | | | | | |
| 2. | Down Childen | Ausco | | | | | |
| 3. | GODT THE WATER | | | | | | |
| 4. | 17 ATULIA | Sen State | | | | | |
| 5.4 | O KREGAD POSVATATURER F | TICA PROCESON ASSOC. | | | | | |
| 6. | 7 | | | | | | |
| 7./ | LORI SWANSON | GFF | | | | | |
| 8. | | | | | | | |
| 9. | | | | | | | |
| 10. | | | | | | | |
| 11. | | | | | | | |
| 12. | | | | | | | |
| 13. | | | | | | | |
| 14. | | | | | | | |
| 15. | | | | | | | |
| 16. | | | | | | | |
| 17. | | χ. | | | | | |
| 18. | | | | | | | |
| 19. | | | | | | | |
| 20. | t | | | | | | |
| 21. | | | | | | | |
| 22. | | | | | | | |
| 23. | | | | | | | |
| 24. | Ĭ | | | | | | |
| 25. | | | | | | | |

Har Haffinger Sea State

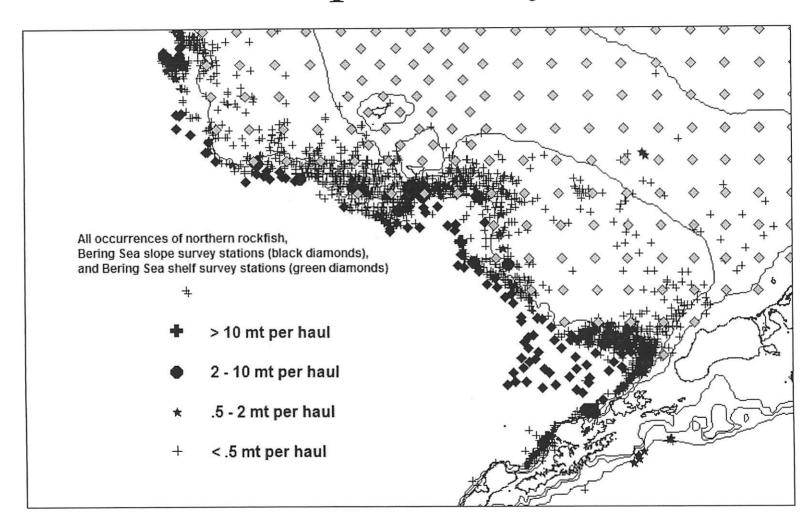
Northern rockfish bycatch locations on BS shelf



Northern rockfish bycatch vs slope survey locations



Northern rockfish bycatch vs. shelf and slope survey locations



Northern rockfish bycatch by observer recorded depth (sampled hauls only, Sea State database, all gear, 1995 - 2002)

| | Begin depth interval | | | Cumulative |
|-------------------|----------------------|-------------|------------|------------|
| SpeciesName | (fathoms) | Weight (mt) | % of total | % |
| NORTHERN ROCKFISH | 30 | 1 | 0% | 0% |
| NORTHERN ROCKFISH | 40 | 56 | 9% | 9% |
| NORTHERN ROCKFISH | 50 | 74 | 13% | 22% |
| NORTHERN ROCKFISH | 60 | 85 | 15% | 37% |
| NORTHERN ROCKFISH | 70 | 75 | 13% | 50% |
| NORTHERN ROCKFISH | 80 | 125 | 21% | 71% |
| NORTHERN ROCKFISH | 90 | 114 | 20% | 91% |
| NORTHERN ROCKFISH | 100 | 16 | 3% | 93% |
| NORTHERN ROCKFISH | 110 | 7 | 1% | 94% |
| NORTHERN ROCKFISH | 120 | 26 | 4% | 99% |
| NORTHERN ROCKFISH | 130 | 1 | 0% | 99% |
| NORTHERN ROCKFISH | 140 | 2 | 0% | 99% |
| NORTHERN ROCKFISH | 150 | 0 | 0% | 100% |

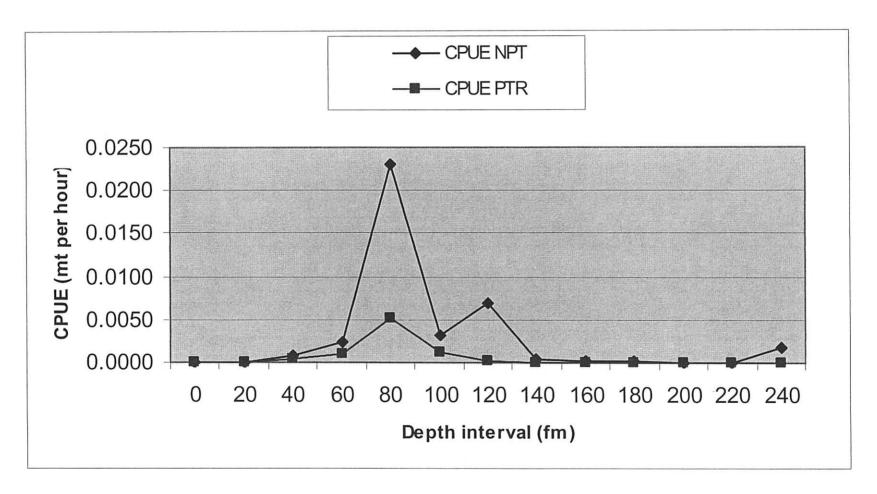
Biomass estimates for EBS northern rockfish (2002 draft SAFE)

| EBS slope survey | | | | |
|-------------------|-------------------|--|--|--|
| | Northern rockfish | | | |
| Survey year | (mt) | | | |
| 1979 | 53 | | | |
| 1981 | 23 | | | |
| 1982 | 24 | | | |
| 1985 | | | | |
| 1988 | 4 | | | |
| 1991 | | | | |
| 2002 | 33 | | | |
| Al portion of EBS | S area | | | |
| | Northern rockfish | | | |
| Survey year | (mt) | | | |
| 1980 | 341 | | | |
| 1983 | 1,516 | | | |
| 1986 | 67,934 | | | |
| 1991 | 582 | | | |
| 1994 | 855 | | | |
| 1997 | 204 | | | |
| 2000 | 49 | | | |
| 2002 | 290 | | | |

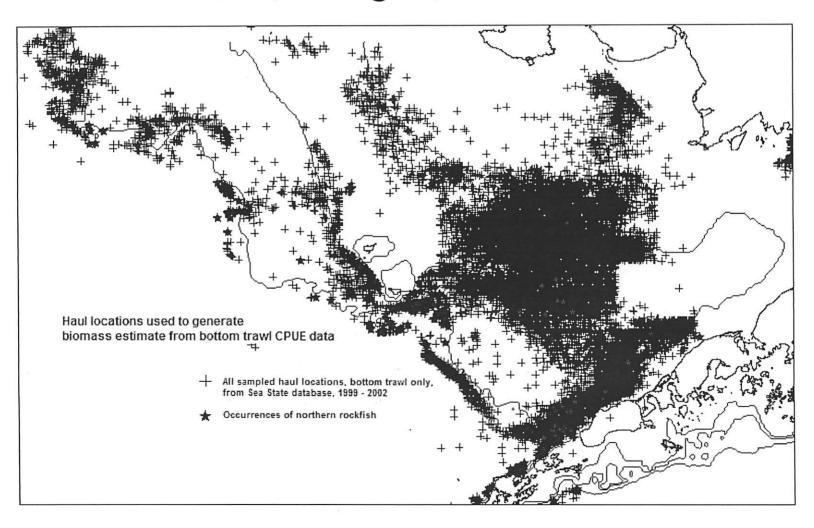
BS shelf survey estimate of northern rockfish biomass (not used)

| | Shelf survey |
|------|--------------|
| Year | estimate |
| 1982 | 520 |
| 1983 | 197 |
| 1984 | 3,090 |
| 1985 | - |
| 1986 | 1,061 |
| 1987 | 5,999 |
| 1988 | 7,259 |
| 1989 | 375 |
| 1990 | 466 |
| 1991 | |
| 1992 | 3,659 |
| 1993 | 59 |
| 1994 | 205 |
| 1995 | - |
| 1996 | 42 |
| 1997 | 736 |
| 1998 | 13,995 |
| 1999 | 397 |
| 2000 | 2,003 |
| 2001 | 973 |
| 2002 | 378 |

CPUE by depth shows decrease after 120 fm, with bottom gear CPUE higher than pelagic gear



Haul locations used in northern rockfish biomass estimate, NPT gear, 1999 – 2002



Northern rockfish biomass estimate from bycatch data 1999 – 2002 combined

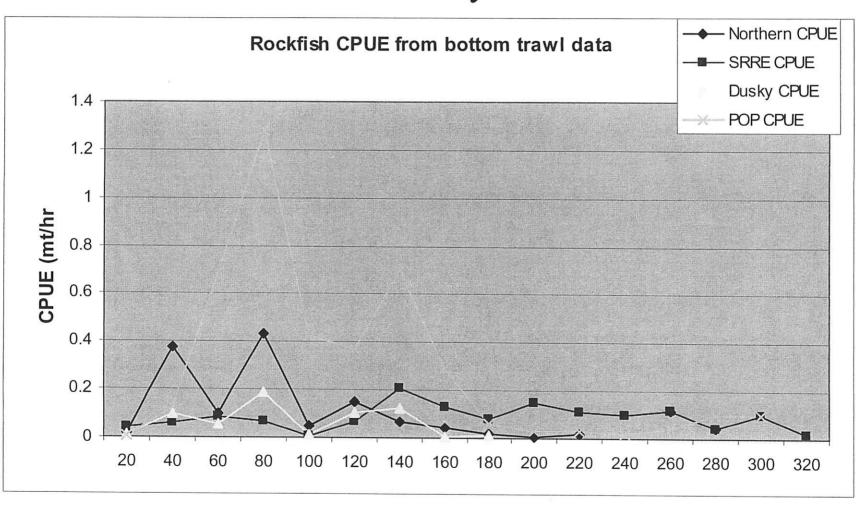
| | | Depth | | Total | | | | | |
|-----|------|----------|------------|----------|-------------|----------|-----------|----------|---------|
| | 1 | Interval | | duration | Northern wt | | Catch/ sq | Area (sq | Biomass |
| | Gear | (fm) | N of hauls | (hrs) | (mt) | Catch/hr | nm | nm) | (mt) |
| NPT | | 20 | 13,038 | 50,117 | 0 | 0.0000 | 0.0000 | | 0 |
| NPT | | 40 | 10,683 | 36,373 | 76 | 0.0021 | 0.0254 | 38,150 | 968 |
| NPT | | 60 | 2,199 | 8,045 | 36 | 0.0044 | 0.0536 | 22,620 | 1,212 |
| NPT | | 80 | 415 | 1,586 | 60 | 0.0378 | 0.4584 | 7,214 | 3,307 |
| NPT | | 100 | 138 | 373 | 0 | 0.0012 | 0.0146 | 3,049 | 44 |
| NPT | | 120 | 276 | 862 | 7 | 0.0079 | 0.0963 | | |
| NPT | ı | 140 | 246 | 777 | 1 | 0.0013 | 0.0157 | | |
| NPT | | 160 | 176 | 565 | 0 | 0.0005 | 0.0062 | | |
| NPT | | Total | 167 | 527 | 0 | 0.0000 | 0.0005 | | 5,531 |

ABC derived from .75 x M x estimated shelf biomass of 5,531 mt = 249 mt

Last 10 years catch or bycatch of northerns on the BS shelf/slope – 1993 and 1995 had directed POP fishery on the BS shelf/slope

| 1993 | 858 |
|--|-----|
| 1994 | 61 |
| 1995 | 265 |
| 1996 | 86 |
| 1997 | 166 |
| 1998 | 42 |
| 1999 | 162 |
| 2000 | 73 |
| 2001 | 155 |
| 2002 | 116 |
| Emparchermogram externo - montensor - non-service - providence aproxima aproxima aproxima aproxima aproxima posterior aproxima ap | |

CPUE by depth for northerns, shortraker/rougheye, POP and dusky rockfish



Northern rockfish distribution - BSAI

