



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
PROGRAM PLANNING AND INTEGRATION  
Silver Spring, Maryland 20910

APR - 8 2004

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act, an environmental review has been performed on the following action.

**TITLE:** Environmental Assessment For the Issuance of an Exempted Fishing Permit for Developing and Testing Gear for Hook-and-line Rockfish Fisheries in the Southeast Outside District of the Gulf of Alaska, February 2004

**LOCATION:** Southeast Outside District of the Gulf of Alaska, Exclusive Economic Zone


**SUMMARY:** This Environmental Assessment (EA) analyzes the potential impacts of issuing an exempted fishing permit (EFP) to allow for the development and testing of hook-and-line gear for harvesting rockfish species in the Southeast Outside District (SEO) of the Gulf of Alaska. The purpose of the EFP is to provide exemptions from: (1) the halibut prohibited species catch limit, (2) individual fishing quota retention requirements, (3) certain fishery closures, and (4) maximum retainable amounts of bycatch in the rockfish fishery. These exemptions will allow the project to be conducted efficiently and without impacting other hook-and-line fisheries. The project is intended to improve the harvest of rockfish species in the SEO, a currently underutilized species group. The analysis found no significant impacts on the human environment for this action.

**RESPONSIBLE OFFICIAL:** James W. Balsiger, Regional Administrator  
Alaska Regional Office  
National Marine Fisheries Service  
P.O. Box 21668  
Juneau, AK 99802  
(907) 586-7228



The environmental review process led us to conclude that this action will not have a significant impact on the environment. Therefore, an environmental impact statement was not prepared. A copy of the finding of no significant impact, including the EA, is enclosed for your information. Also, please send one copy of your comments to the U. S. Department of Commerce, NOAA Office of Strategic Planning, N/SP, SSMC3, Room 15743, 1315 East-West Hwy, Silver Spring, Maryland, 20910.

Sincerely,

*for*   
Susan A. Kennedy  
NEPA Coordinator

Enclosure

## Finding of No Significant Impact

### Environmental Assessment for the Issuance of an Exempted Fishing Permit for Developing and Testing Gear for Hook-and-line Rockfish Fisheries in the Southeast Outside District of the Gulf of Alaska February 2004

The action analyzed is the issuance of an exempted fishing permit (EFP) to allow for the development and testing of hook-and-line gear for the rockfish fisheries in the Southeast Outside District of the Gulf of Alaska. Two alternatives were analyzed for this action. Alternative 1 is the status quo and no additional effects on the human environment beyond effects previously analyzed were identified. Alternative 2 would provide an EFP with exemptions from: (1) hook-and-line fishery closures due to reasons other than overfishing concerns, (2) individual fishing quota retention requirements, (3) PSC limits for halibut, and (4) maximum retainable amounts for rockfish fisheries.

One of the purposes of an EA is to provide the evidence and analysis necessary to decide whether an agency must prepare an environmental impact statement (EIS). This Finding of No Significant Impact (FONSI) is the decision maker's determination that this action will not result in significant impacts to the human environment, and therefore, further analysis in an EIS is not needed. The Council on Environmental Quality regulations defines significance in terms of context and intensity (40 CFR 1508.27). An action must be evaluated at different spatial scales and settings to determine the context of the action. Intensity is evaluated with respect to the nature of impacts and the resources or environmental components affected by the action. NOAA Administrative Order (NAO) 216-6 provides guidance on NEPA specifically to line agencies within NOAA. It further specifies the definition of significance in the fishery management context by listing factors that should be used to test the significance of fishery management actions (NAO 216-6 § 6.01 and 6.02). These factors form the basis of the analysis presented in Sections 4.0 and 5.0 of the attached EA. The results of that analysis are summarized here for each factor.

*Context:* For the issuance of the EFP, the setting of the proposed action is the hook-and-line groundfish fisheries of the GOA. The effect of the issuance of an EFP on society, within this area, is on individuals directly and indirectly participating in the hook-and-line groundfish fisheries and on those who use the ocean resources. Because this action may allow for potential future development of rockfish fisheries in the SEO of the GOA, this action may have impacts on society regionally.

*Intensity:* Listings of considerations to determine intensity of the impacts are in 50 CFR § 1508.27 (b) and in the NAO 216-6, Section 6. Each consideration is addressed below in order as it appears in the regulations.

**Adverse or beneficial impact determinations for marine resources, including sustainability of target and nontarget species, damage to ocean or coastal habitat or essential fish habitat, effects on biodiversity and ecosystems, and marine mammals:** No significant adverse impacts were identified for Alternative 2. No effects were expected on target or non-target species, ocean or coastal habitat, EFH, biodiversity, the ecosystem, seabirds, or marine mammals. Potential effects on prohibited species were limited to Pacific halibut, and those effects were determined to be insignificant.

**Public health and safety** will not be affected in any way not evaluated under previous actions or disproportionately. The EFP will not change fishing methods (including gear types), timing of fishing or quota assignments to gear groups which are based on previously established seasons and allocation formulas in regulations.

**Cultural resources and ecologically critical areas:** This action takes place in the geographic area of the GOA, generally from 3 nm to 200 nm offshore. The land adjacent to this area contains cultural resources and ecologically critical areas. The marine waters where the fisheries occur contain ecologically critical area. Effects on the unique characteristics of these areas are not anticipated to occur with this action.

**Controversiality:** This action involves the permitting of a project to improve utilization of an underutilized fishery. The hook-and-line fishing industry and the Council support this action, and no controversial issues have been identified related to the EFP.

**Risks to the human environment, including social and economic effects:** Risks to the human environment by the GOA groundfish fisheries are described in detail in the Draft PSEIS (NMFS 2003). This action is limited in scope to a project that would last up to two years and with minimal amount of harvest of halibut outside the PSC limit. The effect on the human environment from this additional removal of halibut is insignificant. Socioeconomic effects are possible in the future depending on the success of the project and the implementation of GOA rationalization. It is not possible to predict the outcome of the project, future participation in the SEO rockfish fisheries, or the nature of the GOA rationalization program, and therefore, effects on the socioeconomic component of the human environment are unknown. No significant adverse socioeconomic impacts were identified for Alternative 2.

**Future actions** related to this action may result in impacts. As described in Section 5.0 of the EA, future actions depend on the results of the project and GOA rationalization. Pursuant to NEPA for all future action, appropriate environmental analysis documents (EA or EIS) will be prepared to inform the decision makers of potential impacts to the human environment and to implement mitigation measures to avoid significant adverse impacts. Impacts of future development of SEO rockfish fisheries, the pilot rockfish rationalization program, and GOA rationalization on the socioeconomic component of the environment are unknown.

**Cumulatively significant effects, including those on target and nontarget species:** Beyond the cumulative impacts analysis documented in the Draft PSEIS (NMFS 2003), no additional past or present cumulative impact issues have been identified that would accrue from Alternative 2. Foreseeable future impacts are unknown for Alternative 2, as described above and in Section 5.0 of the EA.

**Districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places:** This action will have no effect on districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places, nor cause loss or destruction of significant scientific, cultural, or historical resources. Because this action is 3 nm to 200 nm off shore, this consideration is not applicable to this action.

**Impact on ESA listed species and their critical habitat:** Because Alternative 2 allows for the harvest of groundfish within the annual total allowable catch limits, no additional effects are expected on ESA listed species beyond those identified in the 2004 harvest specifications EA (NMFS 2004) and the Draft PSEIS (NMFS 2003).

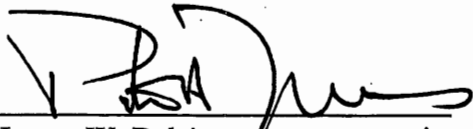
This action poses **no known violation of Federal, State, or local laws or requirements for the protection of the environment.** Issuance of the EFP would be conducted in a manner consistent, to the maximum extent practicable, with the enforceable provisions of the Alaska Coastal Management Program within the meaning of section 30(c)(1) of the Coastal Zone Management Act of 1972, and its implementing regulations.

This action poses **no effect on the introduction or spread of nonindigenous species** into the GOA beyond those previously identified, because it does not change fishing, processing, or shipping practices that may lead to the introduction of nonindigenous species.

### **Comparison of Alternatives and Selection of a Preferred Alternative**

Alternative 1 is the status quo and does not provide for the issuance of an EFP for development of hook-and-line rockfish fisheries in the SEO. Alternative 2 would provide for an EFP that allows the development and testing of hook-and-line gear that could effectively harvest rockfish in the SEO where they have been underutilized. Alternative 2 had no significant impacts identified and unknown socioeconomic and cumulative socioeconomic effects. Alternative 1 had no additional environmental impacts beyond those already identified in previous analyses, but Alternative 1 would not provide for the improved utilization of rockfish resources in the SEO. Because Alternative 2 has no significant adverse impacts identified and provides for the potential for improved utilization of rockfish in the SEO, Alternative 2 is the preferred alternative.

Based on the information contained in the EA for the Issuance of an Exempted Fishing Permit for Developing and Testing Gear for Hook-and-line Rockfish Fisheries in the Southeast Outside District of the Gulf of Alaska, February 2004, and summarized here, I have determined that the action would not significantly affect the quality of the human environment, and therefore, preparation of an environmental impact statement is not required under section 102(2)(c) of the National Environmental Policy Act or its implementing regulations. Therefore, a FONSI is appropriate.



James W. Balsiger  
Administrator, Alaska Region  
NOAA, National Marine Fisheries Service

*Active*

3-30-04

Date

**ENVIRONMENTAL ASSESSMENT**  
**for the Issuance of an Exempted Fishing Permit for Developing and Testing Gear for Hook-and-line**  
**Rockfish Fisheries in the Southeast Outside District of the Gulf of Alaska**

February 2004

**Lead Agency:** National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Alaska Regional Office  
Juneau, Alaska

**Responsible Official:** James W. Balsiger  
Regional Administrator  
Alaska Regional Office

**For Further Information:** Melanie Brown  
National Marine Fisheries Service  
P.O. Box 21668  
Juneau, AK 99802  
(907) 586-7228

**Abstract:** This document is an Environmental Assessment (EA) of the potential impacts of issuing an exempted fishing permit (EFP) to allow for the development and testing of hook-and-line gear for harvesting rockfish species in the Southeast Outside District (SEO) of the Gulf of Alaska. The purpose of the EFP is to provide exemptions from the halibut prohibited species catch limit, individual fishing quota retention requirements, maximum retainable amounts of bycatch, and certain fishery closures to allow the project to be conducted without disruption and without impacting other hook-and-line fisheries. The project is intended to provide a means to improve the harvest of rockfish species in the SEO, a currently underutilized species group. The analysis found no significant impacts on the human environment for this action.

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## **Executive Summary**

The EFP supports a project to develop and test hook-and-line gear for the harvest of rockfish species in the Southeast Outside District (SEO) of the Gulf of Alaska (GOA) that historically had been harvested with trawl gear. Trawl gear has been prohibited in the SEO since March 23, 1998 (63 FR 8356, February 19, 1998). More effective hook-and-line gear is needed to improve the utilization of rockfish resources in the SEO. This project is consistent with Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), national standard 1, which directs that conservation and management measures achieve optimal yield from a fishery, and national standard 5, which seeks efficiency in the utilization of a fishery resource.

The project has two phases: (1) development of two hook-and-line gear types that can be effectively handled on typical Southeast Alaska fishing vessels and that successfully target rockfish species, and (2) comparative testing of the gear types developed in Phase I in terms of catch of target rockfish species per unit of effort and incidental catch of nontarget species. Because this project is in two phases, the permitting will be completed for Phase I only, with permitting for Phase II contingent on review and approval by the Alaska Fisheries Science Center (AFSC) of the experimental design for the comparative testing. The time period of the project is April 15, 2004 through April 15, 2005, with the possibility to extend the EFP up to 12 months to complete the work.

The EFP is necessary to allow the applicant to develop and test hook-and-line gear for rockfish in the SEO with certain exemptions from fishery closures, prohibited species catch (PSC) limits, and fish retention restrictions and requirements. The alternatives are limited to the status quo (Alternative 1) and the issuance of the EFP (Alternative 2). Alternative 2 would provide an EFP with exemptions from: (1) hook-and-line fishery closures due to reasons other than overfishing concerns, (2) individual fishing quota retention requirements, (3) PSC limits for halibut, and (4) maximum retainable amounts for rockfish fisheries. The total amount of groundfish allowed to be harvested is 179 mt, including a 10 mt limit on sablefish bycatch. Halibut mortality is limited to 2 mt. All halibut and sablefish are to be returned to the sea with minimal injury.

The environmental effects of Alternative 2 are limited to PSC and socioeconomic components. No significant effects were identified. The effect of the action on halibut is insignificant. Socioeconomic effects primarily are potential future effects, which cannot be predicted and therefore the significance of such effects are unknown. Possible cumulative socioeconomic effects identified included (1) a developing rockfish fishery, (2) the pilot program for rockfish rationalization, and (3) GOA rationalization. Not enough information is available to determine the significance of these foreseeable future events.

## **Comparison of Alternatives and Selection of a Preferred Alternative**

Alternative 2 had no significant impacts identified and unknown socioeconomic and cumulative socioeconomic effects. Alternative 1 had no additional environmental impacts beyond those already identified in previous analyses, but Alternative 1 would not provide for the improved utilization of rockfish resources in the SEO. Because Alternative 2 has no significant adverse impacts identified and provides for the potential for improved utilization of rockfish in the SEO, Alternative 2 is the preferred alternative.

## 1.0 Purpose and Need

The purpose of the environmental assessment (EA) is to predict whether the impacts to the human environment resulting from this action will be significant. If the predicted impacts from issuing the exempted fishing permit (EFP) are not significant, no further analysis is necessary to comply with the requirements of the NEPA.

The purpose of issuing the EFP is to support a project to develop and test hook-and-line gear for the harvest of rockfish species in the Southeast Outside District (SEO) of the Gulf of Alaska (GOA) that historically had been harvested with trawl gear. Trawl gear has been prohibited in the SEO since March 23, 1998 (63 FR 8356, February 19, 1998). More effective hook-and-line gear is needed to improve the utilization of rockfish resources in the SEO. The EFP applicant, the Alaska Fisheries Development Foundation, has received a \$100,000.00 grant (NOAA Award NA03NMF4540072) for fiscal year 2004 to conduct this project. This project is consistent with Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), national standard 1, which directs that conservation and management measures achieve optimal yield from a fishery, and national standard 5, which seeks efficiency in the utilization of a fishery resource.

The project has two phases: (1) development of two hook-and-line gear types that can be effectively handled on typical Southeast Alaska fishing vessels and that successfully target rockfish species, and (2) comparative testing of the gear types developed in Phase I in terms of catch of target rockfish species per unit of effort and incidental catch of nontarget species. Because this project is in two phases, the permitting will be completed for Phase I only, with continuation to Phase II contingent on review and approval by the Alaska Fisheries Science Center (AFSC) of the experimental design for the comparative testing. The time period of the project is April 15, 2004 through April 15, 2005, with the possibility of an extension up to 12 months to complete the work.

The EFP is necessary to allow the applicant to develop and test hook-and-line gear for rockfish in the SEO with certain exemptions from fishery closures, PSC limits, and fish retention restrictions and requirements. The hook-and-line rockfish fisheries may close to prevent: (1) exceeding a total allowable catch (TAC) amount of a target species, (2) reaching an overfishing level of a nontarget groundfish species, or (3) exceeding a prohibited species catch (PSC) limit for Pacific halibut. The following restrictions are being considered for exemption because information gathered on the catch of target and incidentally taken species will allow the applicant to further modify gear to be more selective to the targeted rockfish species.

The EFP would allow the applicant to continue harvesting up to the amount specified of groundfish in the permit, even if overall rockfish harvest amounts have resulted in the closure of one or more rockfish hook-and-line fisheries in the SEO to avoid exceeding the TAC(s) or exceeding PSC limits for the hook-and-line fisheries. Fishing activities under the proposed EFP would not be exempt from any hook-and-line fishery closures in the SEO that are implemented to address overfishing concerns. The sablefish hook-and-line fishery TAC is set at the acceptable biological catch (ABC) level, and the TAC is fully allocated to the individual fishing quota (IFQ) program. It is likely that qualified individuals contracted for this project will also hold halibut and/or sablefish IFQ. The permit will exempt the participants from the retention requirements for halibut and sablefish under 50 CFR 679.7(f)(11) so that participant will be able to apply their IFQ to a more lucrative harvest and so that all bycatch of halibut and sablefish may be returned to the sea with minimal harm. This will ensure the applicant is able to contract with qualified personnel and the project will result in the minimum amount of sablefish and halibut mortality. The amounts of sablefish (Ackley and

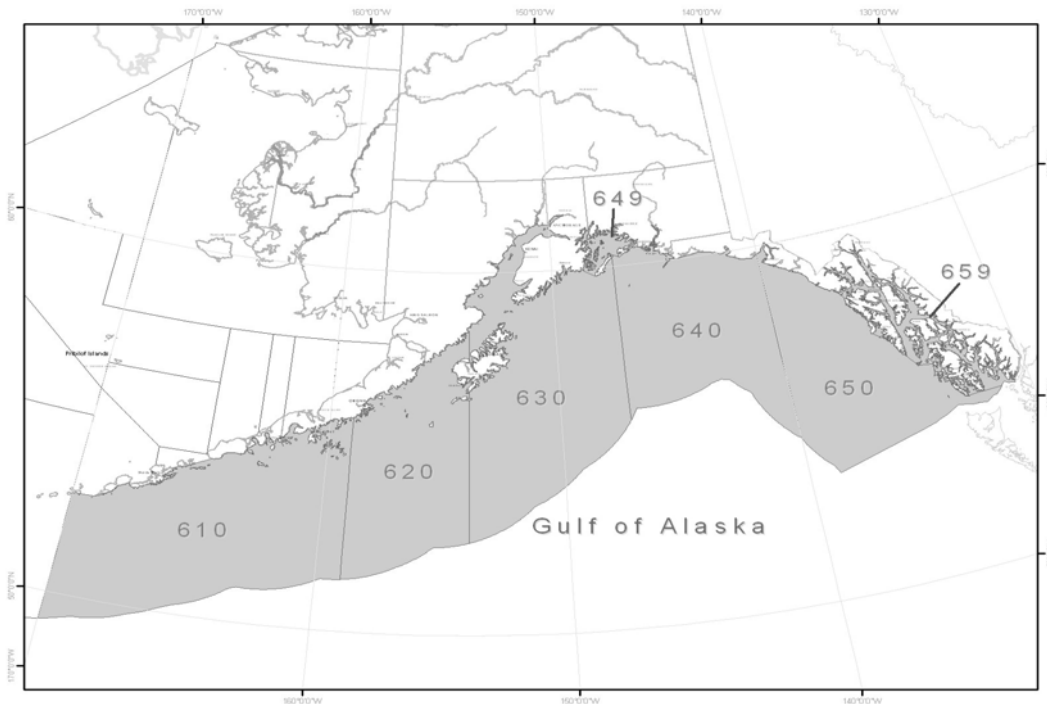
Heifetz 2001) and halibut mortality requested by the applicant is reasonable for the amount of rockfish anticipated to be taken during the project.<sup>1</sup>

The EFP applicant has requested to retain and sell all rockfish species taken while fishing under the EFP. To accommodate this request, the EFP would need to provide exemption from one or more maximum retainable amounts specified in Table 10 of 50 CFR part 679. Demersal shelf rockfish (DSR) are managed by the State of Alaska, which has special provisions for the retention and sale of DSR. Specifically, the project would be conducted in compliance with the State DSR regulations at 5 AAC 28.181, July 25, 2003, which requires full retention of DSR, but limits the amount of this species that may be sold for revenue to the harvester.

### *Project Area*

The rockfish gear testing project will take place in the SEO of the GOA. This area is also described as statistical area 650 for purposes of fisheries management. See Figure 1.1 for the location of area 650, which includes waters in the Exclusive Economic Zone.

**Figure 1.1 Gulf of Alaska (GOA) management area**



<sup>1</sup> The 2 mt amount for halibut is based on anecdotal information provided by the applicant. No data from the SEO pelagic rockfish fisheries is available to determine possible halibut bycatch rates. Personal communication with Gregg Williams, Senior Biologist, IPHC March 5, 2004.

## 2.0 Descriptions of Alternatives

The purpose of this action is to allow the development and testing of hook-and-line gear for the directed fishing of rockfish species in the SEO. The applicant has worked with the Alaska Fisheries Science Center in the development of the project, and this project has been approved by the AFSC (Demaster 2004). Completion of the project would require the applicants' exemption from several groundfish regulations at 50 CFR part 679 including:

**§ 679.7(a)(2):** Persons are prohibited from conducting any fishing contrary to notification of inseason actions, closures, or adjustments under §§ 679.20, 679.21, 679.22, and 679.25. The EFP would allow for the harvest of up to 179 mt of certain groundfish species. The closure of rockfish hook-and-line fisheries for the reasons other than overfishing concerns would not prevent the continuation of fishing activities under the EFP.

**§ 679.7(f)(11):** Persons with available sablefish or halibut IFQ for the vessel category and area in which they are fishing are required to retain sablefish or halibut harvested by hook-and-line gear. For the project, the applicant would discard all halibut or sablefish because there may be difficulties finding participants for the project if they are required to use their IFQ for any halibut or sablefish bycatch. The EFP would exempt the participants from the prohibition against discard of sablefish or halibut when a person who holds available IFQ is participating in the project. All discard is to be done with minimal injury.

**§ 679.20(e):** Maximum retainable amounts of incidentally taken species are specified in Table 10 for the GOA. The applicant will be exempt from these amounts for groundfish to allow the retention of all groundfish, except sablefish, for sale. Rockfish species do not survive being brought to the surface and released so it is no benefit to the resource to require discards. By retaining the incidentally caught groundfish, the applicant will be able to accurately document the effectiveness of the gear types to target certain rockfish species and will recover a portion of the expense of the project.

**§ 679.21(d)(4)(iii)(C):** Pacific halibut taken during the experiment will not be counted against the bycatch limits established for halibut in the other than demersal shelf rockfish (OTDSR) hook-and-line fisheries. The EFP would allow for up to 2 mt of halibut mortality, as determined by consultation with the International Pacific Halibut Commission (IPHC) based on bycatch rates in the rockfish fisheries. The halibut mortality from the project would create an additional burden on the OTDSR hook-and-line industry, if the EFP halibut is counted toward the halibut PSC limits and triggers closure of the OTDSR hook-and-line fisheries.

As the Council has recommended and NMFS has approved for the past EFP experiments dedicated to bycatch reduction, groundfish and prohibited species taken during the experiment may be exempt from being counted against the annual total allowable catch and prohibited species catch limits (65 FR 55223, September 13, 2000) if there is no conservation concern, and if providing the exemptions would facilitate the experiment that would otherwise be prevented by groundfish regulations (50 CFR part 600 and 679). To ensure the ability to harvest fish to develop and test the gear, an exempted fishing permit under 50 CFR 679.6 would need to be issued. Therefore, the alternatives for this action are limited to:

**Alternative 1: No action alternative.** The applicant's request for the rockfish EFP is denied.

**Alternative 2: (Preferred alternative.)** Issue the rockfish EFP with the following conditions:

1. For the combined Phases I and II of the project, the total amount of target, incidental and bycatch groundfish species taken and retained may not exceed 179 mt. Of the 179 mt, no more than 10 mt

of sablefish may be taken. Halibut mortality for the project is limited to 2 mt. If these limits are reached, fishing activities under the EFP must stop. The Regional Administrator must be notified before the limits are reached, if modification of the EFP is to be considered. Considerations may include, but are not limited to: (1) the present amount of harvest of groundfish species by the groundfish fisheries compared to the annual TACs, (2) the progress of the project to date, and (3) the potential impacts of any modification of the EFP.

All groundfish species may be retained for sale except sablefish and halibut, which are to be returned to the sea with minimal injury and except demersal shelf rockfish (DSR), as explained below. The following list provides the applicant's estimates of amounts of each type of groundfish likely to be taken in the project:

Pacific Ocean Perch (POP)	50 mt
Other Rockfish	50 mt
Pelagic Shelf Rockfish	50 mt
Rougheye/Shorthead Assemblage	15 mt
Thornyhead Rockfish	2 mt
Demersal Shelf Rockfish	2 mt
Halibut	2 mt
Sablefish	10 mt

All retained groundfish species will be counted against the annual TAC amounts specified for 2004 and 2005 (50 CFR 679.20).

DSR are managed by the State of Alaska, which has special provisions for the retention and sale of DSR. Specifically, the project would be conducted in compliance with the State DSR regulations at 5 AAC 28.171, July 26, 2003, which requires full retention of DSR, but limits the amount of this species that may be sold for revenue to the harvester.

2. All halibut and sablefish would be discarded so that the participants would be exempt from the IFQ retention requirements under § 679.7(f)(11). Halibut mortality from this project would not be applied against the halibut PSC limits allocated to the OTDSR hook-and-line fisheries in the 2004 and 2005 harvest specifications for the GOA.

3. The maximum retainable amounts specified in Table 10 of 50 CFR part 679 for groundfish species would not apply to the rockfish species retained under this project.

4. The EFP would provide exemption to the applicants from hook-and-line fishery closures resulting from prevention of exceeding a TAC or exceeding the halibut PSC limit.

5. The permit may be modified to extend the valid dates up to 12 additional months in the case that unforeseen circumstances prevent the completion of the project within the valid dates of the permit.

### **3.0 Affected Environment**

The NEPA documents listed below contain extensive information on the fishery management areas, marine resources, ecosystem, social and economic parameters of these fisheries and the harvest specifications. Rather than duplicate an affected environment description here, readers are referred to those documents. All of these are public documents and are readily available in printed form or over the Internet at links given in the references. Because this action is limited in area and scope, the description of the affected environment is incorporated by reference from the following documents:

TAC-Setting Environmental Impact Statement (EIS). A supplemental EIS (SEIS) on the process of TAC setting was completed in 1998 (NMFS 1998). In that document, the impacts of groundfish fishing over a range of TAC levels were analyzed. The five alternatives were very similar to the alternatives considered in the 2004 TAC specifications EA (NMFS 2004). The Record of Decision in that action was an affirmation of the status quo alternative for TAC-setting, which were regulations and fishery management plans as they stood in 1997. Impacts to the human environment from the federal groundfish fisheries were displayed in that EIS. Setting TAC under the status quo procedures was not found to be having significant impacts on the issues evaluated.

Annual Harvest Specification EAs. In addition to the TAC-setting EIS analysis, environmental assessments have been written to accompany each new year's harvest specifications since 1991. One exception was the 2001 harvest specifications were promulgated by emergency rule published in January 2001 without an accompanying NEPA analysis. That was done because the TAC specifications were set by Congressional action at the 2000 levels (Public Law 106-554). An EA was prepared on the 2001 harvest specifications in July 2001 (NMFS 2001). The 2004 harvest specifications were analyzed in an EA and a FONSI determination was made prior to publication of the rule (NMFS 2004). Additionally, the ecosystem considerations section of the Stock Assessment and Fishery Evaluation reports is included as Appendix C to the 2004 harvest specifications EA (NMFS 2004). It contains summaries and pointers to recent studies and information applicable to understanding and interpreting the criteria used to evaluate significance of impacts that will result from alternative harvest quotas.

Groundfish Programmatic EIS. A programmatic SEIS is being prepared to evaluate the fishery management policies embedded in the BSAI and GOA groundfish FMPs against policy level alternatives and the setting of TACs and ABCs at various levels. The Alaska Groundfish Fisheries Revised Draft Programmatic Supplemental Environmental Impact Statement (Draft PSEIS) was made available for public review and comment from August 29-November 6, 2003 (NMFS 2003). For more information see the <http://www.fakr.noaa.gov/sustainablefisheries/seis/default.htm> website.

Gulf of Alaska Groundfish Rationalization SEIS. In this analysis, begun in May 2002, the Council is considering alternative management approaches to "rationalize" the GOA groundfish fisheries. Rationalization may improve the economic stability to the various participants in the fishery. These participants may include harvesters, processors, and residents of fishing communities. The Council is considering these new management policies at the request of the GOA groundfish industry to address its increasing concerns about the economic stability of the fisheries. Some of these concerns include changing market opportunities and stock abundance, increasing concern about the long-term economic health of fishing dependent communities, and the limited ability of the fishing industry to respond to environmental concerns under the existing management regime. The Council may consider rationalizing the fishery through individual fishing quotas, allocations to communities or processors, or cooperatives. Alternatively, the Council may choose to modify the License Limitation Program or maintain the existing management system. As yet, specific alternatives have not been selected, and the SEIS will guide the Council in its decision making process. For more information see the [www.fakr.noaa.gov/sustainablefisheries/goa\\_seis/default.htm](http://www.fakr.noaa.gov/sustainablefisheries/goa_seis/default.htm) website.



#### 4.0 Environmental and Economic Consequences

##### *Environmental Components Potentially Affected*

The issuance of the EFP is limited in scope and will not likely affect all environmental components of the GOA. This project involves the taking of groundfish species, primarily rockfish in the SEO using hook-and-line gear. The applicant requested that the groundfish taken not be counted against the TACs. In 2003, none of the rockfish TAC amounts were approached leaving large amounts of TAC for each rockfish group available through the entire year. See Table 4.1. For 2004, the shortraker/rougheye rockfish TAC was lowered by removing the portion of TAC for the Southeast Inside District state fishery. If harvests are similar to last year, the TAC (and ABCs) are not likely to be approached in 2004, even with the harvest anticipated with the project supported by the EFP. An exemption from the TAC limits is therefore not necessary to facilitate the project.

**Table 4.1 2003 Rockfish Harvest and 2004 TACs in the GOA**

Area	Rockfish Species or Species Group	2003 Total catch (mt)	2003 TAC (mt)	Remaining 2003 TAC (mt)	% taken	2004 TAC (mt)	2004 Est. amount available (mt)
Eastern GOA	Shortraker/rougheye	<b>390*</b>	560	170	70	<b>408**</b>	122
Eastern GOA	Thornyhead	99	800	701	12	520	458
SEO GOA	Pacific Ocean Perch	0	1,640	1,640	0	1,600	1,600
SEO GOA	Pelagic Shelf	11	860	849	1	880	871
SEO GOA	Other rockfish	19	200	181	10	200	180
SEO GOA	Demersal Shelf	244	390	146	62	450	171

\* 57 mt were attributed to SE inside waters state fishery. Catch in the SEO in 2003 was 204 mt.

\*\* TAC does not include amount for state water fishery.

Because the amounts of groundfish taken will be applied against the TACs, no effects beyond those already identified are expected on the physical, benthic communities, non specified species, target species, marine mammals, and seabird components of the environment (NMFS 2004).

Table 4.2 shows the potentially affected components. Two potential environmental sectors may be impacted, PSC and socioeconomic. Under PSC, the effects are limited to Pacific halibut, which may be taken during the project. The development of a rockfish hook-and-line fishery may have socioeconomic impacts on the

participants in the fishery and on those that rely on the same portion of halibut PSC for the OTDSR hook-and-line fisheries.

**Table 4.2 Resources potentially affected by EFP Alternatives**

Alternatives	Potentially Affected Component							
	Physical	Benthic Comm.	Groundfish	Marine Mammals	Seabirds	Non specified Species	Prohibited Species	Socioeconomic
1	N	N	N	N	N	N	N	N
2	N	N	N	N	N	N	Y	Y

N = no impact beyond status quo anticipated by the option on the component.

Y = an impact beyond status quo is possible if the option is implemented.

This section forms the scientific and analytical basis for the issue comparisons across alternatives. As a starting point, Alternative 2 is perceived as having the potential to significantly affect one or more components of the human environment. Significance is determined by considering the context in which the action will occur and the intensity of the action. The context in which the action will occur includes the specific resources, ecosystem, and the human environment affected. The intensity of the action includes the type of impact (beneficial versus adverse), duration of the impact (short versus long term), magnitude of impact (minor versus major), and degree of risk (high versus low level of probability of an impact occurring). Further tests of intensity include: (1) the potential for compromising the sustainability of any target or nontarget species; (2) substantial damage to marine habitats and/or essential fish habitat; (3) impacts on public health or safety; (4) impacts on endangered or threatened species, or critical habitat of listed species; (5) cumulative adverse effects; (6) impacts on biodiversity and ecosystem function; (7) significant social or economic impacts; and (8) degree of controversy (NOAA Administrative Order 216-6, Section 6.02).

Differences between direct and indirect effects are primarily linked to the time and place of impact. Direct effects are caused by the action and occur at the same time and place. Indirect effects occur later in time and/or are further removed in distance from the direct effects (40 CFR 1508.27). For example, the direct effects of an alternative which lowers the harvest level of a target fish could include a beneficial impact to the targeted stock of fish, a neutral impact on the ecosystem, and an adverse impact on net revenues to fishermen, while the indirect effects of that same alternative could include beneficial impacts on the ability of Steller sea lions to forage for prey, neutral impacts on incidental levels of prohibited species catch, and adverse impacts in the form of economic distribution effects, for example, reducing employment and tax revenues to coastal fishing communities.

The section below contains an explanation of the significance criteria. The following ratings for significance are used: beneficial significance, adverse significance, insignificant, and unknown. Where sufficient information on direct and indirect effects is available, rating criteria are quantitative in nature. In other instances, where less information is available, the discussions and rating criteria used are qualitative in nature. In instances where criteria to determine an aspect of significance (significant adverse, insignificant, or significant beneficial) do not logically exist, no criteria are noted. These situations are termed “not applicable” in the criteria tables. An example of an instance where criteria do not logically exist, is the evaluation of the impact vector of incidental take on a declining stock of marine mammals. In that situation, an increase in take that caused a downward change in the population trajectory by greater than 10% is significant adverse. Any level below that which would have an effect on population trajectories is

insignificant because the stock is continuing to decline regardless of fishery effects. There is no logical significant beneficial alternative (a reduction in take resulting in a beneficial effect on the population trajectory). Therefore, a criterion for significant beneficial is not applicable (NMFS 2003).

The rating terminology used to determine significance is the same for each resource, species, or issue being treated, however, the basic “perspective” or “reference point” differs depending on the resource, species, or issue being treated. The reference point relates to the biological environment. For each resource or issue evaluated, specific questions were considered in the analysis. In each case, the questions are fundamentally tied to the respective reference point. The generic definitions for the assigned ratings are as follows:

- S+ Significant beneficial effect in relation to the reference point; this determination is based on interpretations of available data and the judgment of the analysts who addressed the topic.
- I Insignificant effect in relation to the reference point; this determination is based upon interpretations of data, along with the judgment of analysts, which suggests that the effects are small and within the “normal variability” surrounding the reference point. When evaluating an economic or management issue it is used when there is evidence the alternative does not positively or negatively affect the respective factor.
- S- Significant adverse effect in relation to the reference point and based on interpretations of data and the judgment of the analysts who addressed the topic.
- U Unknown effect in relation to the reference point; this determination is made in the absence of information or data suitable for interpretation with respect to the question of the impacts on the resource, species, or issue.
- NE No effect is anticipated from implementation of the action.

#### **4.1 Effects on Prohibited Species**

The only prohibited species managed in the groundfish fisheries in the GOA is Pacific halibut. Alternative 1 is the status quo and would have no additional affects on prohibited species that have not already been analyzed (NMFS 2004). Alternative 2 would allow for additional halibut mortality beyond the PSC limit established for the OTDSR hook-and-line fisheries. The EFP would specify that up to 2 mt of halibut mortality is permitted over the time period of the permit, April 15, 2004 through April 15, 2005 (with a possibility of an additional 2 mt of halibut taken with a 12 month extension of the permit). Very little halibut PSC limit is available in the June 10 through September 1 time period (see Table 4.3), and it is unknown if the applicant will need to conduct fishing during this time. For this reason, the applicant would be exempt from applying halibut mortality from the project against the PSC limit for the OTDSR hook-and-line fishery.

**Table 4.3 Final 2004 halibut PSC limits, allowances, and apportionments.** The halibut PSC limit for hook-and-line gear is allocated to the demersal shelf rockfish (DSR) fishery and fisheries other than DSR. (Values are in metric tons)

Hook-and-line gear			
Other than DSR		DSR	
Dates	Amount	Dates	Amount
Jan 1 - June 10	250 (86%)	Jan 1 - Dec 31	10 (100%)
June 10 - Sept 1	5 (2%)		
Sept 1 - Dec 31	35 (12%)		
	290 (100%)		10 (100%)

The reference point for significance determination for the effects on PSC is the current population trajectory or harvest rate of subject species. The following tables summarize the significance criteria for evaluating the effects of the alternatives on halibut.

**Table 4.4 Criteria used to estimate the significance of effects on stocks of halibut in the GOA**

Effect	Significant Adverse	Insignificant	Significant Beneficial	Unknown
Incidental catch of halibut	Reasonably expected to jeopardize the capacity of the stock to maintain benchmark population levels	Reasonably not expected to jeopardize the capacity of the stock to maintain benchmark population levels	NA	Insufficient information available

Benchmarks: Pacific halibut - estimated long term CEY level,  
NA: not applicable.

**Table 4.5 Criteria used to estimate the significance of effects on harvest levels in state managed directed fisheries targeting stocks of halibut in the GOA**

Effect	Significant Adverse	Insignificant	Significant Beneficial	Unknown
Harvest levels in directed fisheries targeting catch of halibut	Substantial decrease in harvest levels in directed fisheries targeting halibut (>20%)	No substantial increase or decrease (<20%) in harvest levels in directed fisheries targeting halibut	Substantial increase in harvest levels in directed fisheries targeting halibut (>20%)	Insufficient information available

**Table 4.6 Criteria used to estimate the significance of effects on bycatch levels of halibut species in directed groundfish fisheries in the GOA**

Effect	Significantly Adverse	Insignificant	Significant Beneficial	Unknown
Harvest levels of halibut in directed fisheries targeting groundfish species	Substantial increase in harvest levels of halibut in directed fisheries targeting groundfish species (>50%)	No substantial increase or decrease (<50%) in harvest levels of halibut in directed fisheries targeting groundfish species	Substantial decrease in harvest levels of halibut in directed fisheries targeting groundfish species (>50%)	Insufficient information available

1) Criteria used to estimate effects of Alternative 2 on stocks of halibut in the GOA.

The International Pacific Halibut Commission (IPHC) is responsible for the conservation of Pacific halibut resource. The IPHC uses a policy of harvest management based on a constant exploitation rate. The constant exploitation rate is applied annually to the estimated exploitable biomass to determine a constant exploitation yield (CEY). The CEY is adjusted for removals that occur outside the commercial directed hook-and-line harvest (incidental catch in the groundfish fisheries, wastage in halibut fisheries, sport harvest, and personal use) to determine the commercial directed hook-and-line quota. Incidental catch of halibut in the groundfish fisheries results in a decline in the standing stock biomass, a lowering of the reproductive potential of the stock, and reduced short and long term yields to the directed hook-and-line fisheries. To compensate the halibut stock for these removals over the short term, halibut mortality in the groundfish fisheries is deducted on a pound for pound basis each year from the directed hook-and-line quota. Halibut incidentally taken in the groundfish fisheries are of smaller average size than those taken in the directed fishery, this results in further impacts on the long term reproductive potential of the halibut stock, this impact on average is estimated to reduce the reproductive potential of the halibut stock by 1.7 pounds for each 1 pound of halibut mortality in the groundfish fisheries. These impacts are discussed by Sullivan, *et al.* (1994).

The benchmark used to determine the significance of effects for Alternative 2 on the halibut stock was whether or not incidental catch of halibut during the project reasonably would be expected to lower the total CEY of the halibut stock below the long term estimated yield of 80 million pounds (3,629 mt). Because Alternative 2 allows an additional 2 mt of mortality to occur, which is less than .05% of the estimated long term yield, it is not expected to decrease the total CEY of the halibut stock below the long term estimated yield of 80 million pounds and the potential effect is therefore rated insignificant.

2) Criteria used to estimate effects of Alternative 2 on harvest levels of halibut state managed directed fisheries in the GOA.

If under Alternative 2, the catch in the directed fisheries for halibut was not expected to increase or decrease by more than 20% from 2003 levels, the effect was rated insignificant. Harvest levels based on stock conditions often vary over this range from year to year. 2003 was chosen as the benchmark year for purpose of comparison as it is the most recent year for which total catch amounts are available and because management measures in 2003 are similar to those for 2004. Because the project occurs outside of state waters and 2 mt is such a small portion of the total amount of halibut harvest allowed (.05% of 3,859 mt in 2003), the potential change in halibut state managed directed fisheries is well below 20% and is therefore insignificant.

3) Criteria used to estimate effects of Alternative 2 on bycatch levels of halibut in the directed groundfish fisheries in the GOA.

The establishment by the North Pacific Fishery Management Council (Council) of annual halibut PSC limits in the directed fisheries of the GOA and the annual and seasonal apportionments therefore of all halibut limits to gear types and targets in the GOA is of critical importance each year in both minimizing the incidental catch of halibut and in maximizing the optimum yield from the groundfish resources to the fishing industry (see Table 4.3). Under the Magnuson-Stevens Act, national standard 9 directs that when a regional council prepares an FMP, they shall to the extent practicable minimize bycatch and to the extent bycatch cannot be avoided, minimize the mortality of such bycatch. Over the years since the enactment of the Magnuson-Stevens Act in 1976, over 30 FMP amendments designed to help minimize the incidental catch and mortality of prohibited species have been implemented.

Levels of incidental catch of prohibited species in each fishery in 2003 were used to estimate the effects TAC levels set for each fishery on incidental catch levels of prohibited species under each alternative in the 2004 harvest specifications EA (NMFS 2004). It was assumed for each fishery that an increase or decrease in TAC would result in a proportional increase or decrease in incidental catch, increases were not assumed to exceed PSC limitation where applicable. For all prohibited species, if under the alternative considered the incidental catch of prohibited species in the directed fisheries for groundfish was expected to increase or decrease by more than 50% from 2003 levels (chosen as the benchmark year for purpose of comparison) the effect was rated significantly adverse or beneficial, respectively. If under the alternative considered the incidental catch in the directed fisheries for groundfish was not expected to increase or decrease by more than 50% from 2003 levels the effect was rated insignificant, as incidental catch of prohibited species in the directed groundfish fisheries often varies over this range from year to year. If under the alternative considered insufficient information exists to estimate changes in harvest levels the effect was rated as unknown.

Two mt of halibut mortality during the project (and up to 4 mt over two years with an extension) will have no effect on the taking of bycatch in the other groundfish fisheries because the halibut mortality will not be applied against the PSC limited. The OTDSR hook-and-line fisheries bycatch of halibut will not be affected because the PSC limit will not be affected. Alternative 2 allows for such a small amount of halibut mortality that it is not expected to substantially increase or decrease the amount of bycatch in the groundfish fisheries. Therefore, the effects of Alternative 2 on halibut bycatch in other directed fisheries are insignificant.

## **4.2 Social and Economic Effects**

Alternative 1 is the status quo and no additional socioeconomic effects beyond those already analyzed are expected (NMFS 2003). The social and economic effects of Alternative 2 are primarily related to the potential development of a new method of directed fishing for Pacific Ocean perch, pelagic rockfish, and other slope rockfish. Participants in the projects are supported by a \$100,000 grant from NOAA and will receive revenue from the sale of groundfish taken during the project. In 2003, ex-vessel price for unprocessed, landed catch was \$46.87 per mt of POP, \$123.70 per mt of pelagic rockfish, and \$166.37 per mt for other slope rockfish.<sup>2</sup> If prices for these species are similar in 2004, the revenue is estimated to be an additional \$16,850.00 to the applicant. Expenses for conducting the project are unknown, so the difference between revenues and expenses is unknown. The following is a discussion of the types of impacts that may result from the EFP and future development of the rockfish fishery in SEO.

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<sup>2</sup> From the North Pacific Fishery Management Council PacFIN database report of estimated value of unprocessed landed catch and estimated landed groundfish catch in 2003 for the GOA, January 20, 2004.

### *New Information*

Techniques for harvesting rockfish by hook-and-line gear have not been explored in the SEO district. The EFP will provide for the testing of several types of hook-and-line gear and for the reporting of the results to the Council and to industry members. This new information will be a benefit to stakeholders in the rockfish fishery. The Alaska Fisheries Science Center scientist will benefit from the information gathered in the testing of the gear and may apply the information to the development and testing of other hook-and-line gear. The Council will benefit from understanding the potential for harvest of the rockfish resources in the SEO. Hook-and-line fishermen may be provided information on a new opportunity or method for fishing, leading to more effective fishing methods, and increasing potential harvests. It is also likely that the NMFS Observer Program will participate in the study to gather information on the feasibility of observer activities on a small vessel that is not normally required to carry observers. This information would be useful as the Observer Program considers extending observer coverage to vessels less than 60 feet length overall.

### *Improved utilization of the SEO rockfish resource*

If an effective gear type is developed that could selectively harvest POP, pelagic rockfish, and other slope rockfish, more participation in the SEO rockfish fishery may occur and more of the TAC may be harvested. The increased harvest would result in a new supply of rockfish for the market. This could provide benefits to consumers through potentially lower prices and increases in consumers' surplus. The new supplies would also tend to provide new profit opportunities for fishermen exploiting SEO fisheries. Depending on the price impact of the new supplies, fishermen in other rockfish fisheries may experience somewhat lower prices due to the new sources of product competition. Rockfish may also be a substitute fish for another groundfish, which may impact the price or demand of the substituted groundfish species.

If increased exploitation of the SEO rockfish stocks did not have an impact on ex-vessel prices, and if the full 1,600 mt of POP available for harvest in 2003 were not harvested, the harvest would have had an unprocessed landed value of \$74,992.00. If the 2004 combined SEO TAC of 2680 mt for POP, pelagic rockfish, and other slope rockfish were available and harvested, the unprocessed landed value would be \$217,122.00, based on 2003 prices. However, we do not currently have models which would allow us to predict the impact of changes in supply on rockfish prices; therefore, it is not possible to know for certain the actual revenue impacts associated with increased production of this magnitude.

With the improved utilization of rockfish, there may be potential problems with the amount of halibut PSC available for the OTDSR hook-and-line fisheries. Currently, the hook-and-line Pacific cod fisheries take the majority of the OTDSR hook-and-line halibut PSC apportionment, leading to the closure of all hook-and-line fisheries GOA-wide in the spring of 1999, 2000, and 2001, and in the fall of 2003 (NMFS inseason data). Unless additional halibut PSC is made available, the availability of improved gear will not result in improved utilization of the rockfish fishery, and the expansion of a rockfish fishery in SEO may result in earlier closure of OTDSR hook-and-line fisheries.

### *Economic Development*

Harvesters of SEO rockfish may come from the SEO, from other areas of Alaska, or from outside of Alaska. This cannot be predicted at this time. It is not known if increased harvests will be provided to shoreside processors in SEO, shoreside processors outside of the SEO, or if the processing may be done by catcher/processors. To the extent that the fish are caught by fishermen from coastal regions of Alaska, and delivered to shoreside processors, this action may provide additional regional economic development.

## 5.0 Cumulative Effects

Analysis of the potential cumulative effects of a proposed action and its alternatives is a requirement of the NEPA. An environmental assessment or environmental impact statement must consider cumulative effects when determining whether an action significantly affects environmental quality. The Council on Environmental Quality (CEQ) regulations for implementing NEPA define cumulative effects as:

“the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR 1508.7).

Cumulative effects are thoroughly analyzed for the groundfish fisheries in the revised Draft PSEIS in Chapter 4.0 (NMFS 2003). Section 4.1.4 describes the methodology used to do the cumulative effects analysis. In Section 4.5 and the accompanying tables in Appendix A, the current groundfish management regime is analyzed for effects on the environment, including cumulative effects for reach component of the environment. A summary of the cumulative effects of Alternative 1 of the Draft PSEIS is in Table 5.1. See Section 4.5 of the Draft PSEIS for further details on the cumulative effects.

**Table 5.1 Cumulative Effects Summary for Alternative 1 from Draft PSEIS**

Environmental Component	Cumulative Effects
Target Species	I and U
Prohibited Species	CS-, U, and I
Forage Species	CS-, U, and I
Nonspecified species	U
Habitat	CS-
Seabirds	CS-, I, S-, none, U
Steller sea lions	CS -, I
Other marine mammals	CS- and I
Socioeconomic	I and CS-
Ecosystems	I and CS-

I = insignificant effect

U = unknown significance of effect

S = significant

CS= conditionally significant

- = adverse

+ = beneficial

Only two environmental components were identified that potentially could be affected by Alternative 2, prohibited species and socioeconomic components. Alternative 1 in this EA is the status quo and no additional cumulative effects are expected beyond those already identified in previous analyses (NMFS 2003). No additional cumulative effects on prohibited species are expected from Alternative 2 because the PSC limits for halibut in the hook-and-line fisheries are not expected to change and no additional past, present or foreseeable future effects have been identified.



Alternative 2 would permit the development of gear that may lead to the development of a hook-and-line rockfish fishery in SEO. Three foreseeable future actions that may have cumulative socioeconomic effects are: (1) the future development of a rockfish hook-and-line fishery, if the project is successful, (2) a pilot rockfish rationalization program, and (3) GOA rationalization. The development of a hook-and-line rockfish fishery in the SEO may have an effect on revenues for participants and markets, as explained in Section 4.5, but it is not possible at this time to predict the success of the project under the EFP or the future participation in a rockfish fishery.

The pilot rockfish rationalization program is part of the Consolidated Appropriations Act, 2004, Title VIII, Section 802. The Act provides for the development of a pilot program for rationalizing the rockfish fisheries in the Central GOA. No implementation date is specified and the program would sunset with the implementation of GOA rationalization. Rockfish fisheries in the Central GOA are primarily trawl fisheries, but a number of participants are also known to participate in the hook-and-line halibut and sablefish fisheries. Because of the participation in hook-and-line fisheries, it is possible that participants in the Central GOA rockfish fisheries may move effort into the SEO, if a hook-and-line fishery develops, especially if the fisherman is limited in participation in the Central GOA rockfish fishery by the pilot rationalization program. It is unknown at this time if a rockfish rationalization program will be developed before the implementation of GOA rationalization, therefore the effects of a future rockfish rationalization program on the SEO district rockfish fishery are unknown.

GOA rationalization may result in the shifting of fishing effort from areas where rockfish fisheries are fully rationalized to areas that have not been fully rationalized, resulting in more effort moving from the western and central GOA to the SEO. The GOA rationalization program is in the very early stages of development, and it is not possible to describe the potential changes in effort that may occur or how markets and revenues may be affected. Because of uncertainty of future participation in the rockfish hook-and-line fishery in SEO and the unknown nature of the pilot rockfish and GOA rationalization programs, cumulative socioeconomic effects of Alternative 2 are unknown.

No additional past, present, or reasonably foreseeable cumulative impact issues have been identified that would accrue from Alternative 2.

## **6.0 Environmental Analysis Conclusions**

Alternative 1 is the status quo. No EFP would be issued, and therefore, no additional effects would occur beyond those already identified and analyzed in the Draft SEIS (NMFS 2003) and in the 2004 harvest specifications EA (NMFS 2004). For this reason, impact analyses in this EA were exclusively for Alternative 2. In addition to the Draft PSEIS and the 2004 harvest specifications EA, the significance of impacts of the actions analyzed in this EA were determined through consideration of the following information as required by NEPA and 50 CFR Section 1508.27:

*Context:* For the issuance of the EFP, the setting of the proposed action is the hook-and-line groundfish fisheries of the GOA. The effects of the issuance of an EFP on society, within this area, are on individuals directly and indirectly participating in the hook-and-line groundfish fisheries and on those who use the ocean resources. Because this action may allow for potential future development of a rockfish fishery in the SEO of the GOA, this action may have regional impacts on society.

*Intensity:* Listings of considerations to determine intensity of the impacts are in 50 CFR §1508.28(b) and in the NOAA Administrative Order 216-6, Section 6. Each consideration is addressed below in order as it appears in the regulations.

**Adverse or beneficial impact determinations for marine resources, including sustainability of target and nontarget species, damage to ocean or coastal habitat or essential fish habitat, effects on biodiversity and ecosystems, and marine mammals:** No significant adverse impacts were identified for Alternative 2. No effects were expected on target or nontarget species, ocean or coastal habitat, EFH, biodiversity, the ecosystem, seabirds, or marine mammals. Potential effects on prohibited species were limited to Pacific halibut, and those effects were determined to be insignificant.

**Public health and safety** will not be affected in any way not evaluated under previous actions or disproportionately. The EFP will not change fishing methods (including gear types), timing of fishing or quota assignments to gear groups, which are based on previously established seasons and allocation formulas in regulations.

**Cultural resources and ecologically critical areas:** This action takes place in the geographic area of the GOA, generally from 3 nm to 200 nm offshore. The land adjacent to this area contains cultural resources and ecologically critical areas. The marine waters where the fisheries occur contain ecologically critical areas. Effects on the unique characteristics of these areas are not anticipated to occur with this action.

**Controversiality:** This action involves the permitting of a project to improve utilization of an underutilized fishery. The hook-and-line fishing industry and the Council support this action, and no controversial issues have been identified related to the EFP.

**Risks to the human environment, including social and economic effects:** Risks to the human environment by the GOA groundfish fisheries are described in detail in the Draft PSEIS (NMFS 2003). This action is limited in scope to a project that would last up to two years and with minimal amount of harvest of halibut outside the PSC limit. The effect on the human environment from this additional removal of halibut is insignificant. Socioeconomic effects are possible in the future depending on the success of the project and the implementation of GOA rationalization. It is not possible to predict the outcome of the project, future participation in the SEO rockfish fishery, or the nature of the GOA rationalization program, and therefore, effects on the socioeconomic component of the human environment are unknown. No significant adverse socioeconomic impacts were identified for Alternative 2.

**Future actions** related to this action may result in impacts. As described in Section 5.0, future actions depend on the results of the project and GOA rationalization. Pursuant to NEPA for all future action, appropriate environmental analysis documents (EA or EIS) will be prepared to inform the decision makers of potential impacts to the human environment and to implement mitigation measures to avoid significant adverse impacts. Impacts of a future development of an SEO rockfish fishery, the pilot rockfish rationalization program, and GOA rationalization on the socioeconomic component of the environment are unknown.

**Cumulatively significant effects, including those on target and nontarget species:** Beyond the cumulative impact analysis in the draft PSEIS (NMFS 2003), no additional past or present cumulative impact issues have been identified that would accrue from Alternative 2. Foreseeable future impacts are unknown for Alternative 2, as described above and in Section 5.0.

**Districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places:** This action will have no effect on districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places, nor cause loss or destruction of significant

scientific, cultural, or historical resources. Because this action is 3 nm to 200 nm at sea, this consideration is not applicable to this action.

**Impact on ESA listed species and their critical habitat:** Because Alternative 2 allows for the harvest of groundfish within the annual TACs, no additional effects are expected on ESA listed species beyond those identified in the 2004 harvest specification EA (NMFS 2004) and the Draft PSEIS (NMFS 2003).

This action poses **no known violation of Federal, State, or local laws or requirements for the protection of the environment.** Issuance of the EFP would be conducted in a manner consistent, to the maximum extent practicable, with the enforceable provisions of the Alaska Coastal Management Program within the meaning of Section 30(c)(1) of the Coastal Zone Management Act of 1972, and its implementing regulations.

This action poses **no effect on the introduction or spread of nonindigenous species** into the GOA beyond those previously identified because it does not change fishing, processing, or shipping practices that may lead to the introduction of nonindigenous species.

### **Comparison of Alternatives and Selection of a Preferred Alternative**

Alternative 1 is the status quo and does not provide for the issuance of an EFP for development of a hook-and-line rockfish fishery in the SEO. Alternative 2 would provide for an EFP that would allow for the development of hook-and-line gear that could effectively harvest rockfish in the SEO where they have been underutilized. Alternative 2 had no significant impacts identified and unknown socioeconomic and cumulative socioeconomic effects. Alternative 1 had no additional environmental impacts beyond those already identified in previous analyses, but Alternative 1 would not provide for the improved utilization of rockfish resources in the SEO. Because Alternative 2 has no significant adverse impacts identified and provides for the potential for improved utilization of rockfish in the SEO, Alternative 2 is the preferred alternative.

## **7.0 List of Preparers and Contributors**

Brown, Melanie. Fisheries Regulations Specialist, Sustainable Fisheries Division, NMFS Alaska Region, P.O. Box 21668, Juneau, Alaska 99802-1668.

Campbell, Rebecca. Sustainable Fisheries Division, NMFS Alaska Region, P.O. Box 21668, Juneau, Alaska 99802-1668 (document preparation).

Muse, Ben. Economist, Sustainable Fisheries Division, NMFS Alaska Region, P.O. Box 21668, Juneau, Alaska 99802-1668.

Williams, Gregg. Senior Biologist, International Pacific Halibut Commission, P.O. Box 95009, Seattle, WA 98145-2009 (halibut bycatch).

Dinneford, Elaine. Fisheries Analyst, North Pacific Fishery Management Council, 605 West 4<sup>th</sup>, Suite 306, Anchorage, Alaska 99501-2252 (catch values).

Ackley, David. Supervisory Fisheries Resources Management Specialist, NMFS Alaska Region, P.O. Box 21668, Juneau, Alaska 99802-1668.

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