

Application for Issuance of an Exempted Fishing Permit to Test a Selective Flatfish Trawl (including Scottish Seine) in an area otherwise closed to fishing, 2005

A. **Date of application:** July 12, 2004 (*updated October 12, 2004*)

B. **Applicant Contact**

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C. **Statement of purpose and goals of the experiment, for which an EFP is needed, including a general description of the arrangements for the disposition of all species harvested under the EFP:**

The purpose of this exempted fishing activity is to collect data on the rate at which unintended species (particularly overfished shelf rockfish such as bocaccio and canary rockfish), are taken by commercial fishers targeting shelf flatfish and California halibut in federal waters off the state of California. Fishers will be required to use an experimental small footrope trawl net and will be restricted to areas outside of 3 miles. The experimental net, which was designed by Oregon Department of Fish and Wildlife (ODFW), was specifically designed to be more selective in the harvest of flatfish species than the trawl net configurations that are currently used in the fishery. Testing of this modified trawl in California was first conducted in 2003 in the area south of 40° 10' N latitude; however, only one vessel participated, over a narrow geographic range. In order to draw conclusive results for management consideration over a broader geographic range, this experiment requires additional years of data to be collected. A second year of study engaging two vessels is scheduled for October through December 2004. A continuation of the study in 2005 may be required to collect necessary data to determine the effectiveness of modified small footrope trawl gear in minimizing impacts on overfished shelf rockfish species when accessing healthy flatfish stocks on the shelf.

Pacific Coast groundfish are managed by the Pacific Fishery Management Council (PFMC) under a federal fishery management plan (FMP) for the west coast. The management goals of the FMP are to:

- Prevent overfishing by managing for appropriate harvest levels and prevent any net loss of the habitat of living marine resources.

- Maximize the value of the groundfish resource as a whole.
- Achieve the maximum biological yield of the overall groundfish fishery, promote year-round availability of quality seafood to the consumer, and promote recreational fishing opportunities.

The experiment conducted through an EFP will assist the PFMC in achieving the goals set forth in the FMP while collecting bycatch data on overfished stocks and evaluating the effectiveness of specific trawl gear modifications in reducing bycatch of overfished stocks. In particular, this EFP expands the applicability of equivalent gear tested off the coasts of Oregon and Washington in EFP studies over the past two years, which are being developed into regulations to be implemented in 2005 for the area north of 40° 10' N latitude. Further evaluation in the area south of 40° 10' N latitude is needed before results may be applied coastwide.

The specific goals of the experiment are:

- To evaluate the effectiveness of modified trawl gear (see Section I below for modified trawl gear specifications) to catch shelf flatfish while minimizing take of overfished rockfish species in all depths.
- To measure bycatch rates of overfished rockfish and groundfish species that may be associated with the small footrope trawl shelf flatfish fishery using the modified trawl gear with no depth restrictions through an at-sea observer program.
- To provide fishermen with an incentive to modify their gear by giving them the opportunity to take shelf flatfish in areas that are otherwise closed.

Disposition of the species harvested under the EFP will be as follows:

- Species caught within the normal current trip limits may be retained and sold by the vessel.
- All rockfish caught while targeting shelf flatfish during the EFP must be retained and offloaded. Overages of rockfish must be surrendered, and proceeds from these species in excess of trip limits will be forfeited to the State of California.

D. Valid justification explaining why issuance of an EFP is warranted:

Since 1998, the PFMC has initiated rebuilding plans for several species, including bocaccio and canary rockfish. Conservation areas have since been established and closed to groundfish fishing in order to prevent harvest of the overfished stocks in multi-species fisheries. Critical to these rebuilding plans and to the overall improvement of groundfish management, is the need for more and better scientific

data. There are more than 90 species of groundfish covered under the FMP, and at present, there is little or no data on a large number of these species. There is a need for comprehensive, timely, and credible data for priority species to aid in the conservation and rebuilding efforts for these stocks.

The shelf flatfish are an extremely important group of groundfish in the California groundfish fisheries. These stocks are believed to be healthy, and California fishermen and processors have worked aggressively to develop strong markets for these species. A component of the California trawl fleet and processors are heavily dependent upon these flatfish.

A depth closure was enacted from July 1 to December 31, 2002 to reduce the take of overfished shelf rockfish in the primary depths of their range, which applied to all trawlers, including vessels targeting shelf flatfish using small footrope trawl. An EFP was approved for use inside the closed area to observe rockfish bycatch rates of unmodified shelf flatfish trawl gear targeting shelf flatfish. Results from the 2002 EFP indicated that the incidental take of bocaccio and other sensitive rockfish species was minimal in depths to 70 fathoms (fm) using conventional flatfish trawl gear. Access to depths below 70 fm was not granted due to the increased likelihood of incidental take of bocaccio rockfish, canary rockfish, and other sensitive species in deeper waters. Although results of the experiment to 70 fm were promising, the question remained if a shelf flatfish fishery could be successfully prosecuted in deeper waters where shelf rockfish abundance increases.

In 2003 and 2004, EFPs were issued to California to conduct a follow-up fishery experiment in deeper waters, out to 100 fm (in 2003) and to unrestricted depths (in 2004), where the likelihood of incidental take of bocaccio and other shelf rockfish is higher. An important condition added under these EFPs was a requirement to use a modified shelf flatfish trawl design. The design follows the net configuration used in an ODFW research and EFP project to evaluate the bycatch rates of overfished shelf rockfish species while targeting flatfish with the modified trawl. Results from the ODFW experiment with the modified trawl net showed a reduction in the bycatch rate of canary rockfish. The application of a similar trawl design was applied in the 2003 California EFP to test the effectiveness of the gear in minimizing the bycatch of not only canary, but also of bocaccio, which is an overfished stock in coastal California. While the Oregon results were significant enough to lead to a proposal to move the experimental net design into regulations north of 40°10' N latitude in 2005, the 2003 California EFP results are inconclusive at this time because only one vessel in a narrow geographic range participated in the experiment. To draw sound conclusive results, this experiment requires additional data to be collected from a larger pool of vessels. A continuation of the study has been approved to commence in October 2004, and is due to be completed December 2004. The results of the 2004 study are not available at the time of this application, and it is therefore not possible to evaluate whether 2004 EFP results will be sufficient for purposes of considering management applications. Therefore, this application proposes the continuation of the study for a third and final year in 2005 should it be necessary.

E. A statement of whether the proposed experimental fishing has broader significance than the applicant's individual goals.

The applicant of this EFP believes that the information collected during this experiment will have significance, broader than the applicant's individual goals, applicable to fisheries throughout California and the West Coast.

- The experiment will produce data on the amount and location of overfished groundfish bycatch in the shelf flatfish fishery using this trawl, and provides samples of these species from areas otherwise closed to groundfish fishing.
- Results indicating that overfished groundfish bycatch rates are minimized while using this modified trawl could lead to a management tool that allows the Council to maximize sustainable access to healthy shelf flatfish stocks while overfished groundfish stocks are rebuilt.
- This EFP complements a series of EFP experiments conducted off the west coast to evaluate the effectiveness of modified trawl gear to avoid overfished groundfish. Since 2002, both Oregon and Washington have tested the effectiveness of modified trawl gear to avoid overfished groundfish while fishing for healthy groundfish stocks. In California, comparable testing of the same modified trawl gear over shelf waters in California is in progress, commencing with a single participant in the 2003 study, and continuation of the study with two participants in 2004. Regulations based on the successful EFP results in Oregon are being crafted for implementation north of 40° 10' N. lat. during the 2005-06 Council management cycle. The thorough evaluation of the modified trawl gear in California, where there are differences in the composition of shelf species relative to the northern area, may result in the opportunity to extend this regulatory provision to flatfish trawl fishermen off the entire coast of California.

F. Vessels covered under the EFP:

Vessels covered under the EFP will include those which have historically participated in the targeted shelf flatfish fishery off California according to criteria used in the 2002, 2003, and 2004 flatfish EFPs:

- Vessels must have landed into California ports at least 10,000 pounds of shelf flatfish (California halibut, Pacific sanddab, English sole, sand and rock sole, starry flounder, and unspecified flatfishes) taken with trawl gear in at least two of six years from 1998 to 2003.
- Vessels must have a valid California delivery permit.

Vessels identified as qualifiers in the 2004 EFP process will qualify for this pool of applicants.

A letter of inquiry will be sent to the owners of each of the qualifying vessels requesting a statement of interest to be returned by a specified closing date.

A maximum of **six** vessels will be selected to participate throughout the EFP fishing period, with a goal of issuing permits to two vessels per California port group along the central California coast from Point Conception and Cape Mendocino. Potential port complexes are Morro Bay/Avila, Monterey/Moss Landing, and Half Moon Bay/San Francisco/Bodega Bay.

Applications received will be selected at random following the closing date if more vessels apply than can be accommodated by observers.

Any EFP may be canceled and made available to another vessel if the permitted vessel: 1) does not follow the terms and conditions of the permit; 2) fails to follow federal or State fishing regulations; 3) does not prosecute shelf flatfish using a modified small footrope trawl gear as specified in the EFP; or 4) does not reasonable accommodate the observer or cooperate with the applicant.

A permitted vessel may withdraw once from the EFP program and resume participation the following month.

G. A description of the species (target and incidental) to be harvested under the EFP and the amount(s) of such harvest necessary to conduct the experiment:

The target species are collectively referred to as *shelf flatfish* and include sanddabs, English sole, rock and sand sole, unspecified flatfish, and California halibut which is not a federally managed groundfish. The maximum expected landed catch per vessel for all species will be the normal trip limits in place for periods 5 and 6. That allowable trip limit for other flatfish is 110,000 pounds per two months of which no more than 42,000 pounds may be petrale sole. EFP participants will be exempted from routine in-season closures or reductions in allowable trip limits during the EFP study period. Trip limits for EFP participants will be increased to match any increases in federal trip limits resulting from in-season adjustments. Note that California halibut is not included in the trip limit and is estimated later in this section. Total harvest of target species for the EFP fishery is as follows:

Species/Species Group	(Vessels) x (no. periods) in EFP ¹	Cumulative limit per two months (lbs)	Maximum allowable catch (lbs)	Maximum allowable catch (mt)
Other flatfish	6 x 2 = 12	110,000; no more than 42,000 pounds may be petrale sole	1,320,000; no more than 504,000 may be petrale sole	599 mt; no more than 229 mt may be petrale sole

¹ A maximum of 6 vessels will be operating for the entire EFP period, encompassing 2 cumulative trip limits periods.

The program requires full retention of rockfish. All rockfish species will be landed to enhance biological sampling and to document the actual rockfish mortality and discard rates, with catch thresholds in place for overfished rockfish species to

ensure that take remains below allocated bycatch caps. The EFP thresholds for incidental take of bocaccio, cowcod, canary, and yelloweye rockfish will be applied as follows:

- Monthly per species threshold: An individual vessel will be constrained to a maximum of 1,000 pounds of bocaccio, and 50 pounds each of canary, yelloweye and cowcod rockfish per fishing month. If these amounts are exceeded for any of the four species, then all fishing by that vessel will be terminated for the balance of the month, but may resume for the following month.
- Monthly cumulative threshold: The cumulative amount of bocaccio harvested by all vessels fishing under the EFP must not exceed 6,000 pounds in a fishing month. The cumulative amount of canary, cowcod, or yelloweye rockfish harvested by all vessels fishing under the EFP must not exceed 300 pounds in a fishing month. If that amount is exceeded for any of the four species by all vessels combined, then all EFP fishing will be terminated for the remainder of the month, but may resume for the following month.
- EFP threshold: The cumulative amount of bocaccio rockfish harvested by all vessels fishing under the EFP must not exceed 22,000 pounds (10 mt) at any time. Additionally, the cumulative amount of canary, cowcod, or yelloweye rockfish must not exceed 1,000 pounds (0.5 mt) at any time. If the cumulative EFP threshold amount is exceeded for any of the four species, then all EFP fishing will be terminated for the remainder of the year.
- EFP threshold for lingcod: The maximum amount of total lingcod that may be taken by all participating vessels fishing under this EFP is 20 mt. If the limit for this species is reached, the EFP will be terminated for the remainder of the year.

Estimates of expected total fishing mortality are based on bycatch rates from our 2002 EFP experiment, except that estimated take of overfished rockfish species is based on the EFP species thresholds contained in this proposal. Actual bycatch rates of these overfished rockfish species during the 2002 EFP were well below these thresholds, with bycatch rates of 0.0001 for bocaccio, 0.0002 for cowcod rockfish, <0.0001 for canary, and zero yelloweye rockfish. Although 2002 NMFS West Coast Groundfish Observer Program (WCGOP) data indicate that in waters deeper than 100 fm proposed for access in this study, the probability of bocaccio catch increases significantly when using unmodified conventional flatfish trawl gear, it is anticipated that the use of the selective flatfish trawl during this EFP period will reduce the take of overfished rockfish, including bocaccio. Therefore, the total estimated fish mortality in metric tons for overfished rockfish species (including lingcod) for this EFP is as follows:

Threshold Species	EFP Landing Threshold/ Estimated Total Catch (mt)
Bocaccio Rockfish	10.0
Canary Rockfish	0.5
Cowcod Rockfish	0.5
Yelloweye Rockfish	0.5
Lingcod	20.0

Based on bycatch rates calculated from our EFP program in 2002, the total 2005 EFP bycatch of species and species groups additional to target flatfish and overfished rockfish species is projected below. Note that the bycatch listed below reflects both retained and discarded species, and as such does not reflect total mortality.

Species/Species Group	Bycatch Rate ¹ (2002)	Expected Catch (landed and discarded) ² (lbs)	Expected Catch ² (mt)
California Halibut	0.074	97,680	44.3
Nearshore Rockfish	0.001	1,320	0.6
Shelf Rockfish	0.010	11,880	5.3
Slope Rockfish	<0.000	40	<0.0
Lingcod	0.006	7,920	3.6
Pacific hake	0.003	3,960	1.8
Sablefish	0.009	9,240	4.2
Sharks	0.017	22,440	10.2
Skates and Rays	0.071	93,720	42.5

¹ Bycatch is defined as the total landed and discarded pounds of a species relative to the total landed target species (shelf flatfish).

² There are six vessels that will be operating for the entire 4 months of the EFP, encompassing 2 periods of cumulative trip limits. Expected bycatch is equal to the (bycatch rate) x (flatfish 2-month trip limit; 110,000 lbs) x (6 vessel) x (2 landing limit periods).

H. For each vessel covered by the EFP, the approximate time(s) and place(s) fishing will take place:

- The test fishery will be conducted from August through November 2005.
- The EFP will be valid in those Pacific Ocean waters adjacent to the California coast seaward of 3 miles and south of 40° 10' N latitude. While the allowable depth exceeds the eastern boundary for the non-trawl rockfish conservation area (RCA) (100 fm during the proposed study period), the removal of a depth restriction is necessary to test the modified trawl gear in areas with a history of bocaccio bycatch, and to allow for fishing at depths where target flatfish species may be distributed.

I. All participating vessels under the authority of the EFP:

- Must exclusively employ legal selective flatfish trawl gear which is a type of small footrope gear as defined in current federal regulation.
- Must apply and submit a net plan for approval. Net plans must meet specifications utilized by the 2003 Oregon Flatfish EFP, and by the 2003 and 2004 California Flatfish EFPs, which specified that:
 - *The selective flatfish trawl net must be a two-seamed net and its breastline may not be longer than 3 ft in length.*
 - *There may be no floats along the center third of the selective flatfish trawl net's headrope, except for Scottish seine, for which there must be no floats along the middle 25% of the headrope.*
 - *The selective flatfish trawl net must have a headrope at least 30% longer than the footrope.*
 - *Selective flatfish trawl gear may not have a footrope that is longer than 105 ft in length.*
 - *The headrope must be wide in the center, not a narrow V-shape that creates shoulders that would trap ascending fish.*
- Must carry a National Marine Fisheries Service-trained observer onboard all trips using the selective flatfish net in the NTZ. A total of three observers are necessary to execute the EFP. Vessels participating in the program must share observer time.
- Must land all fish caught under the authority of the EFP into the State of California.
- Must sign a contract with the State of California detailing the vessel's responsibility for the EFP fishery. Failure to abide by the conditions in the contract or to follow provisions in the EFP will result in revocation of the contract and of the EFP for the year.

J. Signature of the applicant:

California Department of Fish and Game