

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

A. **Date of application:** Draft: May 26, 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 the experiment is to determine whether a shelf flatfish fishery can be prosecuted in an otherwise closed area of California waters using modified small footrope trawl gear including Scottish seine designed to minimize the bycatch of overfished groundfish. Testing of this modified trawl in California was first conducted in 2003 in the area South of 40°10' N. lat; however, only one vessel participated, and the area tested was in a narrow geographic range. In order to draw conclusive results for management consideration over a broader range in California, this experiment requires additional years of data to be collected. A second year of study engaging six vessels is scheduled for August through November 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 EFPs during the past two years, which are being developed into regulations to be implemented in 2005 for the area north of 40°10' N. lat. Further evaluation in the area south of 40°10' N. lat 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 groundfish and rockfish 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 82 species 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 modified shelf flatfish trawl gear. The design follows the net configuration used in an Oregon research and EFP project to evaluate the bycatch rates of overfished shelf rockfish species while targeting flatfish with the modified trawl. Results from the Oregon experiment were promising and reflected a reduced bycatch rate of canary rockfish. The application of a similar trawl design was applied in the California EFP to test the effectiveness of the modified trawl in minimizing the bycatch of not only canary, but also of bocaccio, which is an overfished stock in coastal California. The 2003 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 August 2004, and is due to be completed November 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 six 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 two of three years from 1998 to 2000.
- 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 between Pt. Conception and Pt. 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 California halibut, Pacific sanddab, English sole, rock and sand sole, and unspecified flatfish. The maximum expected catch per vessel for all species will be the normal trip limits in place in Period 4. That allowable trip limit for other flatfish is anticipated to be 120,000 pounds per two months of which no more than 20,000 pounds may be Petrale sole. EFP participants will be exempted from any 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 anticipated to be the same as in the 2004 EFP and will therefore be:

Species/Species Group	Vessels * no. periods in EFP ¹	Cumulative limit per two months (lbs)	Maximum allowable catch (lbs)	Maximum allowable catch (mt)
Other flatfish	6*2=12	120,000; no more than 20,000 pounds may be Petrale sole	1,440,000; no more than 120,000 may be Petrale sole	653 mt; no more than 54.4 mt may be Petrale sole

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

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, canary, or yelloweye 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 cowcod 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.

Expected fishing mortality of overfished groundfish for this EFP are based on bycatch estimates derived from the 2002 EFP study. Data collected under the 2003 EPF was not used to estimate mortality rates for overfished groundfish because only one vessel participated in the program over a narrow geographic range. Bycatch rates for overfished groundfish and rockfish species during the 2002 EFP were well below these thresholds, with bycatch rates of 0.01% for bocaccio, 0.02% for cowcod rockfish, and 0% for canary and yelloweye rockfish. Although 2002 NMFS observer data indicates 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 significantly reduce the probable take of any overfished rockfish species, including bocaccio. However, some bycatch is likely to occur. Therefore, the total estimated fish mortality in metric tons for overfished species (including overfished rockfish and lingcod) for this EFP is as follows:

Species/Species Group	EFP Threshold (mt)	Total Estimated Catch (mt)
Bocaccio Rockfish	10.0	10.0
Canary Rockfish	0.5	0.5
Cowcod Rockfish	0.5	0.2
Yelloweye Rockfish	0.5	0.5
Lingcod	20.0	20.0

Based on bycatch information from our EFP program in 2002, the following catches would be expected in addition to target flatfish and overfished rockfish species, if the bycatch rates were the same as in 2002:

Species/Species Group	Bycatch Rate ¹ (2002)	Expected Bycatch ² (lbs)	Expected Bycatch ² (mt)
Other Flatfish	2.67	3,844,800	1,744
California Halibut	8.02	11,548,800	5,239
Nearshore Rockfish	0.14	201,600	91
Shelf Rockfish	2.86	4,118,400	1,868
Lingcod	0.56	806,400	366
Sablefish	0.44	633,600	287
Sharks	1.23	1,771,200	803
Skates	5.87	8,452,800	3,834
Crab, Dungeness and misc.	7.02	10,108,800	4,585
King Salmon	0.09	129,600	59
Green Sturgeon	0.06	86,400	39
Misc. Fish ³	4.74	6,825,600	3,096
Nominal Bycatch Species ⁴	0.16	230,400	105

¹ Bycatch is defined as the total landed and discarded pounds of a species relative to the total landed target species group (i.e., the trip limit). An estimate of discarded 'other flatfish' is included in this table as discards of target species may occur due to size, market, etc.

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 bycatch rate*120,000 lbs (flatfish 2-month trip limit)*6*2.

³ Miscellaneous fish includes white croaker, squid, hake, rattfish, scorpionfish, and shad, and other misc. fish.

⁴ Nominal bycatch includes species with *individual bycatch rates* of <0.05% in 2002, and includes the following species: slope rockfish, white seabass, striped bass, cabezon, surfperch, greenlings, midshipman, and surfperch.

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 California coastwide in all depths outside state waters (3 miles). While the allowable depth exceeds the shoreward boundary for the trawl RCA (up to 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 catches, 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 small footrope trawl as defined in current federal regulation, except that modification is required to create a severely cut-back top section, which allows roundfishes to “rise” out of the trawl while flatfish, which remain near the bottom, are captured.
- 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 trawl must have a headrope to footrope ratio of at least 1.30 (i.e., 30% longer footrope).*
 - *The trawl must have a maximum rise of 5 ft at the center of the headrope.*
 - *There must be no floats along the middle 33% of the headrope”, except for Scottish seine, for which there must be no floats along the middle 25% of the headrope.*
 - *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